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El Niño Monitoring Center
Japan Meteorological Agency

気 象 庁 海 洋 気 象 部 海 洋 課
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本月報に関する問い合わせは、

〒100　東京都千代田区大手町１-３-４　気象庁海洋気象部海洋課エルニーニョ監視センターまで。

電　話 (03) 3212-8341 (内線 5134､5135)

ＦＡＸ (03) 3211-3047

電子メール elnino@umi.hq.kishou.go.jp

Monthly Ocean Report is prepared by the El Niño Monitoring Center, Oceanographical Division, Marine Department, Japan Meteorological Agency.

Correspondence relating to this report may be directed to :

Kunio SAKURAI
Head, El Niño Monitoring Center, Oceanographical Division
Marine Department, Japan Meteorological Agency
1-3-4 Ote-machi, Chiyoda-ku, Tokyo 100 Japan
Facsimile: +81-3-3211-3047
e-mail : elnino@umi.hq.kishou.go.jp

表紙は、1995年12月の太平洋の月平均海面水温偏差図です。

陰影部は、平年より高温の海域を示しています。

The figure on the front cover shows the monthly mean SST anomalies for December 1995 in the Pacific Ocean.

Areas of positive anomalies are shaded.

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海況の特徴（1995年12月）

太平洋の海況

太平洋赤道域の海面水温は、170°E以東で平年より低く､特に170°Wから東では平年より0.5℃以上低い海域が広がっていた。エルニーニョ監視海域（4°S～4°N,150°W～90°W）の海面水温偏差は、-0.7℃であった（第１表、第１図、第６図）。一方、165°E以西では平年より0.5℃以上高く、西太平洋熱帯域（0°～14°N，130°E～150°E）の海面水温は、平年より0.5℃以上高い状態が８月以降継続している。12月の同海域の海面水温は平年より0.6℃高く、12月としては1949年以降で最も高い値となった（第Ａ表、図Ａ）。

太平洋の赤道に沿った表層水温は、前月と同様に、水温躍層に沿って西部で正偏差、東部では負偏差であった（第９図）。

北太平洋では、30°Nから40°Nにかけての150°W以西は平年より低かったが、その他の海域は概ね平年より高く、米国西岸及びオホーツク海からカムチャツカ半島の南東沖にかけて1℃以上高かった（第6図）。

日本近海の海況

日本近海の海面水温は、北海道周辺で平年より0.5℃以上高かったが、その他の海域では平年より低く、特に日本海中部、三陸沖及び東海沖では平年より1℃以上低かった（第24図）。

黒潮は、九州・四国に接岸して流れた後、紀伊半島から東南東に流れ、八丈島の南を経て伊豆諸島の東を北に向かい、房総半島沖を北東に流れていた（第27図）。

本州東方の親潮系の冷水（深さ100mで５℃以下）は、沿岸寄りの分枝は41.6°N，144.3°Eまで、沖合の分枝は39.7°N,146.0°Eまで、それぞれ達していた（第26図）。

熱帯の気象

対流活動は、南シナ海からフィリピン付近にかけてかなり活発で、フィリピン付近の上層雲量指数は+4.0と過去最高だった。150°E以東の赤道付近では、今月も対流活動は不活発だった。南方振動指数（ＳＯＩ）は、-0.5 と再び負偏差になった（第１表、第3～5図、第12図）。

［気象庁長期予報課提供］

HIGHLIGHTS December 1995

Pacific

Sea surface temperatures (SSTs) were below normal east of 170°E in the equatorial Pacific, especially east of 170°W where SSTs were more than 0.5°C below normal. The SST index for region B (Fig. 1) was -0.7°C (Table 1 and Figs. 1 and 6) . SSTs were more than 0.5°C above normal west of 165°E. Positive SST anomalies greater than 0.5°C have continued in region D (Fig. 1) since August 1995. The SST index for region D (Fig. 1) was +0.6°C in December, which is the largest value recorded since 1949 (Table A and Fig. A) .

Negative subsurface temperature anomalies in the eastern equatorial Pacific continued and positive in the western equatorial Pacific. These anomalies were found around the thermocline (Fig. 9).

SSTs were above normal in the North Pacific, except for negative anomalies between 30°N and 40°N west of 150°W. Positive SST anomalies greater than 1°C were observed along the west coast of North America and from the Sea of Okhotsk to southeast of the Kamchatka Peninsula (Fig. 6).

Seas adjacent to Japan

SSTs in the seas adjacent to Japan were below normal, except around Hokkaido where SSTs were more than 0.5°C above normal. In particular, negative anomalies greater than 1°C below normal were observed in the central part of the Japan Sea, off Sanriku and off Tokai (Fig. 24).

The Kuroshio flowed along the coast of Kyushu and Shikoku, then ESE-ward from the Kii Peninsula. After passing south of Hachijo Island, it flowed northward east of the Izu Islands and northeastward off the Boso Peninsula (Fig. 27).

Coastal and off-coastal branches of the Oyashio cold water (below 5°C at a 100 m depth) extended southward to 41.6°N, 144.3°E and 39.7°N, 146.0°E, respectively (Fig. 26).

Atmospheric conditions in the tropics

Convective activities were stronger than normal from the South China Sea to the Philippines and weaker than normal along the equator east of 150°E. The high cloud amount index around the Philippines was +4.0 that was a record since 1978. The Southern Oscillation Index (SOI) returned to the negative (-0.5) (Table 1, Figs. 3-5 and 12).

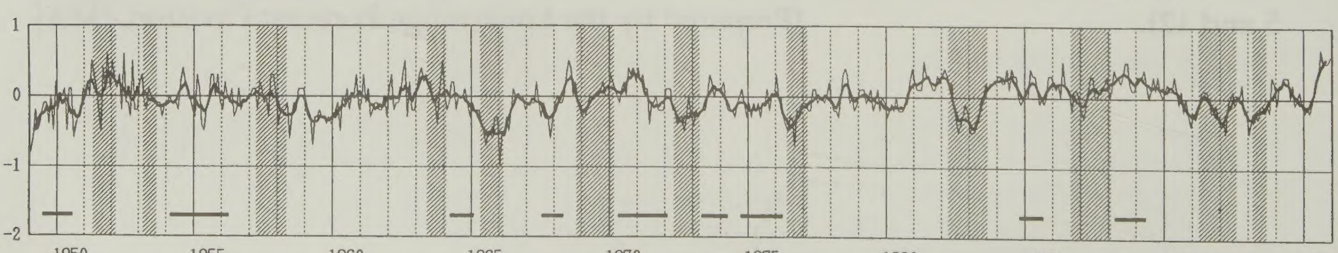
[Prepared by the Long-range Forecast Division, JMA]

Monthly mean SST for region D from 1949 to 1995

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Normal	28.5	28.3	28.4	28.8	29.1	29.3	29.2	29.1	29.2	29.3	29.2	28.9
1949	27.7	27.7	28.2	28.3	28.7	29.1	29.1	29.0	28.8	29.3	28.7	29.1
1950	28.3	28.3	28.4	28.9	28.6	29.4	29.3	28.5	28.8	29.0	28.9	29.0
1951	28.5	28.5	28.4	29.3	29.4	29.4	29.0	28.6	29.6	29.4	29.8	29.0
1952	29.0	28.5	28.5	29.1	28.9	29.9	29.1	29.0	28.9	29.8	29.0	28.7
1953	28.7	28.6	28.3	28.6	29.2	29.3	29.1	29.0	29.1	29.2	28.9	28.8
1954	28.4	28.3	28.3	28.7	29.0	29.1	29.4	29.5	29.4	29.4	29.2	28.7
1955	28.2	28.6	28.5	28.4	28.6	29.1	29.1	29.4	29.5	29.3	29.5	28.8
1956	28.3	28.5	28.4	28.7	29.2	29.0	29.0	29.2	29.0	29.2	29.1	28.9
1957	28.5	28.4	28.5	28.6	29.3	29.4	29.1	29.1	28.9	29.6	29.5	28.9
1958	28.1	28.1	28.2	28.6	29.0	28.7	28.9	29.0	29.0	29.4	29.3	29.0
1959	28.4	28.1	28.1	28.1	28.8	29.0	29.0	28.8	28.9	28.9	28.9	28.5
1960	28.2	28.1	28.3	28.3	29.1	29.2	29.3	28.9	29.2	29.3	29.5	28.7
1961	28.4	28.6	28.3	28.9	28.8	29.1	29.1	29.0	29.0	29.1	29.2	28.6
1962	28.6	28.6	28.2	28.7	29.0	29.3	29.5	29.6	28.9	29.5	29.0	28.7
1963	28.6	28.6	28.8	29.0	29.4	29.5	29.4	29.0	29.1	28.9	29.3	29.4
1964	28.5	28.1	28.3	29.0	29.3	29.1	29.2	29.1	29.2	29.4	29.1	28.6
1965	28.4	28.1	28.2	28.6	28.7	28.8	28.5	28.6	28.7	28.7	28.9	28.6
1966	27.5	27.8	27.9	28.5	28.6	29.1	29.3	29.1	29.2	29.3	29.2	28.7
1967	28.4	28.2	28.3	28.7	29.3	29.2	28.9	29.0	29.0	29.0	28.6	28.6
1968	28.4	28.3	28.3	28.7	29.1	29.6	29.7	29.5	29.2	29.5	29.1	28.7
1969	28.2	28.0	28.2	28.8	29.1	29.3	29.2	29.1	29.3	29.5	29.2	28.9
1970	28.8	28.5	28.5	28.8	29.0	29.4	29.4	29.1	29.6	29.6	29.6	29.1
1971	28.9	28.5	28.7	28.9	29.2	28.9	29.1	29.0	29.2	29.1	29.0	28.7
1972	28.6	28.4	28.5	28.6	28.9	28.9	28.9	28.8	28.7	29.0	29.2	28.6
1973	28.1	28.1	28.1	28.6	28.9	29.1	29.2	29.4	29.4	29.3	29.3	29.0
1974	28.6	28.5	28.3	28.6	28.9	29.1	28.9	29.0	29.2	29.4	29.1	28.6
1975	28.4	28.0	28.3	28.6	29.0	29.0	29.1	29.0	29.3	29.1	29.2	28.9
1976	28.8	28.3	28.4	28.5	28.7	28.8	28.9	28.8	28.5	29.1	29.0	28.8
1977	28.4	28.2	28.2	28.6	29.2	29.4	29.1	29.1	29.2	29.2	29.2	29.1
1978	28.4	28.1	28.2	28.5	29.1	29.6	29.6	29.4	29.1	29.3	29.0	28.8
1979	28.6	28.4	28.5	28.7	29.1	29.4	29.0	29.0	29.3	29.1	29.2	28.8
1980	28.2	28.1	28.3	28.6	29.1	29.1	29.0	28.9	29.1	29.2	29.4	29.3
1981	28.7	28.4	28.5	28.9	29.6	29.6	29.5	29.3	29.3	29.4	29.5	29.1
1982	28.8	28.7	28.7	29.0	29.3	29.2	28.9	28.6	28.8	29.0	29.1	28.7
1983	28.0	27.8	27.9	28.4	28.8	29.3	29.2	29.3	29.3	29.5	29.4	29.1
1984	28.8	28.6	28.6	29.0	29.5	29.4	29.6	29.4	29.5	29.3	29.1	28.9
1985	28.5	28.3	28.8	29.1	29.4	29.4	29.1	29.1	29.1	29.3	29.5	29.2
1986	28.7	28.4	28.6	28.8	29.6	29.5	29.3	29.2	29.0	29.4	29.3	28.9
1987	28.3	28.0	28.3	28.9	29.4	29.6	29.2	29.1	29.3	29.4	29.4	29.2
1988	28.5	28.4	28.8	29.1	29.4	29.5	29.5	29.6	29.7	29.5	29.3	29.0
1989	28.8	28.6	28.7	29.2	29.3	29.3	29.3	29.4	29.3	29.6	29.3	28.9
1990	28.6	28.5	28.5	28.9	29.4	29.4	29.1	29.2	29.0	29.3	29.0	28.5
1991	28.3	28.0	28.2	28.8	29.2	29.4	29.3	29.1	29.0	29.1	29.1	28.6
1992	28.1	28.0	27.9	28.7	29.1	29.4	29.1	29.1	29.2	29.5	29.0	28.7
1993	28.0	28.0	28.2	28.6	28.8	29.2	29.1	28.9	29.1	29.1	29.5	29.1
1994	28.4	28.5	28.6	29.1	29.4	29.6	29.2	29.3	29.1	29.3	29.3	28.8
1995	28.3	28.2	28.2	28.7	29.2	29.6	29.5	29.8	29.7	29.8	29.7	29.5

表A　D海域（EQ–14° N, 130° E–150° E）の1949年～1995年の月平均海面水温（℃）
平年値は各月の30年間（1961年～1990年）の平均値

Table A　Monthly mean SST (°C) for region D (EQ-14°N, 130°E-150°E) from 1949 to 1995.
Normals are computed from 30-year (1961-1990) base period.



エルニーニョ現象　El Niño event　　ラニーニャ現象　La Niña event

図A　D海域の海面水温偏差時系列図（1949年～1995年）

Fig. A　Time series of monthly mean SST anomalies (°C) for region D from 1949 to 1995

DATE	SEA SURFACE TEMPERATURE AND ANOMALY (°C)								SEA LEVEL ANOMALY (cm)					
	Region D 14N-Eq. 130E-150E		Region A 4N-4S 160E-150W		Region B 4N-4S 150W-90W		Region C Eq.-10S 90W-80W		Yap 10N,138E	Rabaul 4S,152E	Majuro 7N,171E	Tarawa 1N,173E	Christ-mas 2N,157W	Santa Cruz 1S, 90W
JAN 95	28.3	-0.2	29.0	+1.0	26.2	+0.8	25.7	+1.4	-3.2	-1.9	2.0	7.4	7.6	6.5
FEB 95	28.2	-0.1	28.9	+0.9	26.8	+0.6	26.1	+0.4	-7.0	-1.5	5.0	5.0	1.6	4.9
MAR 95	28.2	-0.2	28.8	+0.7	26.9	0.0	25.8	-0.1	1.5	6.3	5.6	1.5	0.0	-2.4
APR 95	28.7	-0.1	28.8	+0.6	26.9	-0.2	24.6	-0.5	-6.7	9.5	10.6	0.7	-3.2	-10.9
MAY 95	29.2	+0.1	29.0	+0.5	26.2	-0.4	23.1	-0.8	-3.2	6.4	5.7	3.8	2.1	-7.5
JUN 95	29.6	+0.3	29.0	+0.5	26.0	-0.1	22.2	-0.5	-0.8	5.5	-0.6	2.2	-0.4	-2.4
JUL 95	29.5	+0.3	28.7	+0.2	25.3	+0.1	21.7	+0.1	5.3	10.7	1.0	-0.2	-5.6	-0.3
AUG 95	29.8	+0.7	28.4	0.0	24.3	-0.3	20.5	-0.1	3.8	15.1	6.7	-3.3	-8.9	-2.5
SEP 95	29.7	+0.5	28.1	-0.2	24.0	-0.6	20.7	+0.4	8.9	16.7	7.6	-2.7	-14.3	-2.7
OCT 95	29.8	+0.5	28.0	-0.4	23.9	-0.7	20.4	-0.3	13.0	15.5	4.6	1.1	-6.1	-4.9
NOV 95	29.7	+0.5	27.9	-0.5	23.9	-0.7	21.5	0.0	16.0	-	10.8	-1.5	-9.5	-3.2
DEC 95	29.5	+0.6	28.0	-0.2	24.2	-0.7	21.9	-0.7						

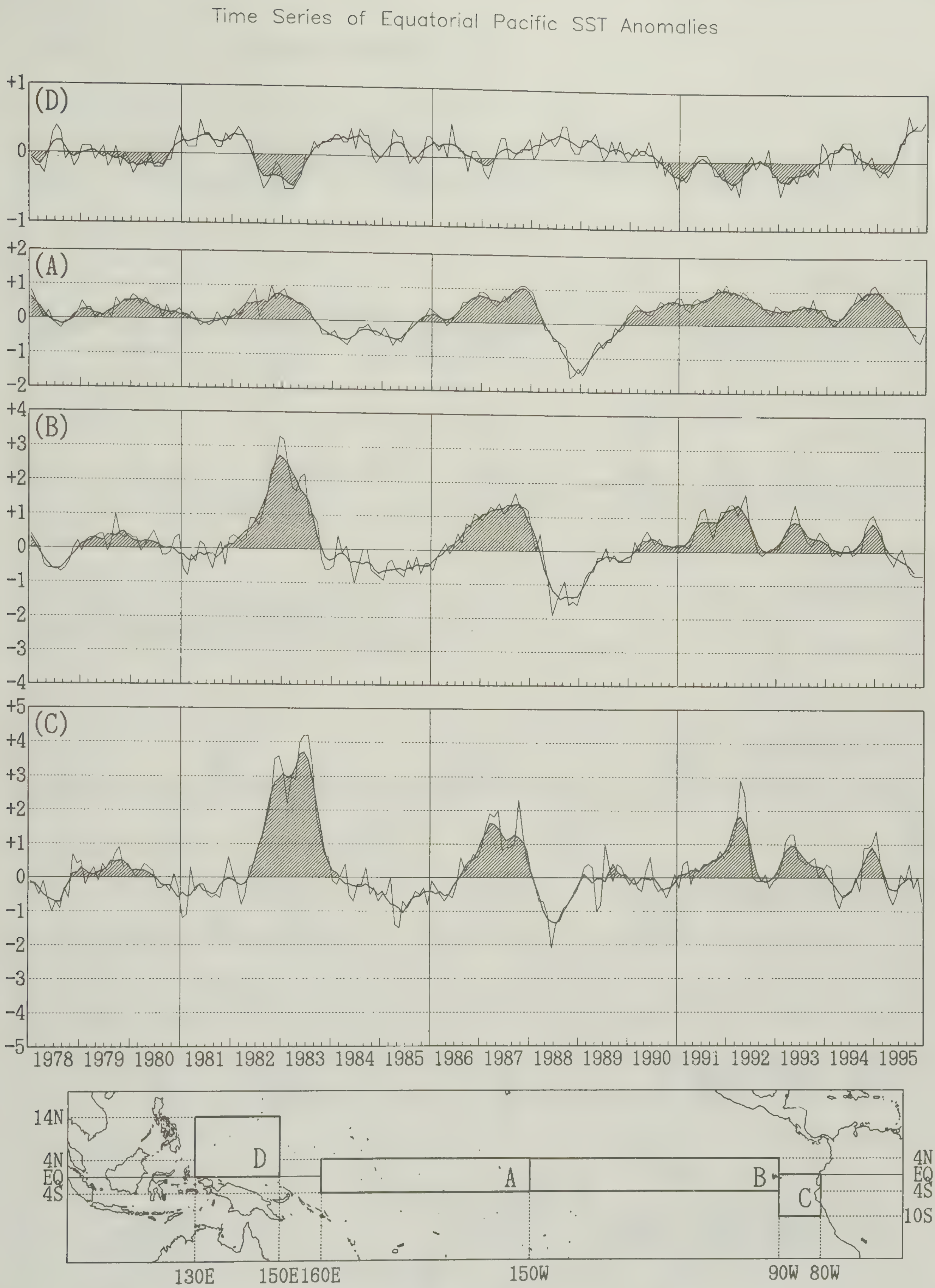
第１表（ａ）　エルニーニョ監視指数

Table 1 (a) El Niño monitoring indices. Data sources are the El Niño Monitoring Center of JMA for the sea surface temperature and anomaly and SOC for ISLP-Pac, Department of Oceanography, University of Hawaii for the sea level anomaly.

DATE	SOI	SEA LEVEL PRESSURE ANOMALIES		HIGH CLOUD AMOUNT INDEX			EQUATORIAL ZONAL WIND INDEX				
		TAHITI 17°33'S, 149°37'W	DARWIN 12°24'S, 130°52'E	HCLD-PH 20N-10N 110E-140E	HCLD-MC 5N-5S 110E-135E	HCLD-DL 5N-5S 170E-170W	U200-IN 5N-5S 80E-100E	U200-CP 5N-5S 180 -125W	U850-WP 5N-5S 160E-175W	U850-CP 5N-5S 170W-135W	U850-EP 5N-5S 130W-100W
JAN 95	-0.4	-0.3	0.6	-1.1	-0.4	1.2	-0.4	-0.2	-0.3	-0.6	0.3
FEB 95	-0.2	0.6	1.1	-0.7	-0.3	0.3	-0.8	-0.5	-0.4	0.1	-0.1
MAR 95	0.4	0.3	-0.5	-0.7	0.3	-0.3	-0.2	-0.1	-0.7	-0.4	-0.3
APR 95	-1.4	-1.6	0.0	-1.1	-0.2	-0.6	0.7	0.0	0.0	-0.2	0.1
MAY 95	-1.1	-0.7	0.6	0.3	-1.2	-0.1	-0.9	0.1	0.0	-0.1	0.2
JUN 95	-0.1	0.3	0.4	-1.8	-0.4	-0.7	0.2	0.2	-0.9	-0.4	0.6
JUL 95	0.4	0.4	-0.4	1.5	-0.1	-0.7	-1.1	-0.1	-0.8	-0.8	0.3
AUG 95	0.0	0.4	0.3	0.3	-0.1	-1.1	-0.0	1.4	-1.3	-1.5	-1.0
SEP 95	0.2	0.4	0.0	1.4	0.7	-1.0	-2.0	1.5	-0.9	-1.0	-0.1
OCT 95	-0.3	-0.7	-0.5	0.1	0.2	-1.0	-0.8	0.6	-1.2	-0.7	0.1
NOV 95	0.1	0.1	-0.1	0.1	1.4	-1.2	-2.1	0.8	-1.1	-0.8	-0.8
DEC 95	-0.5	-0.8	0.0	4.0	1.2	-1.2	-0.3	-0.1	-1.0	-0.3	0.3

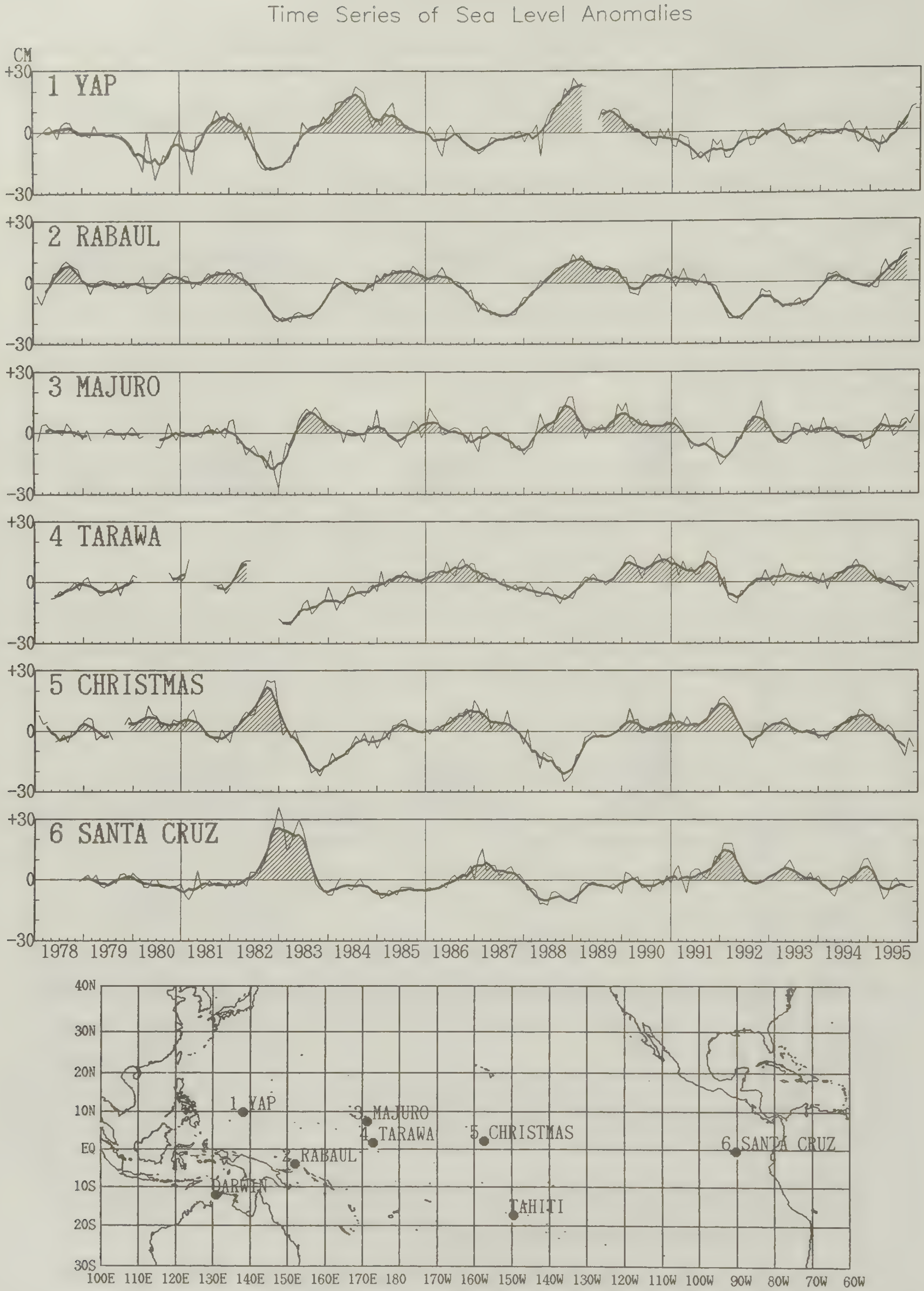
第１表（ｂ）　エルニーニョ監視指数（続き）

Table 1 (b)　El Niño monitoring indices (continued).
Data sources are the Long-range Forecast Division of JMA for the atmospheric conditions.



第1図　太平洋赤道域の海面水温偏差時系列図

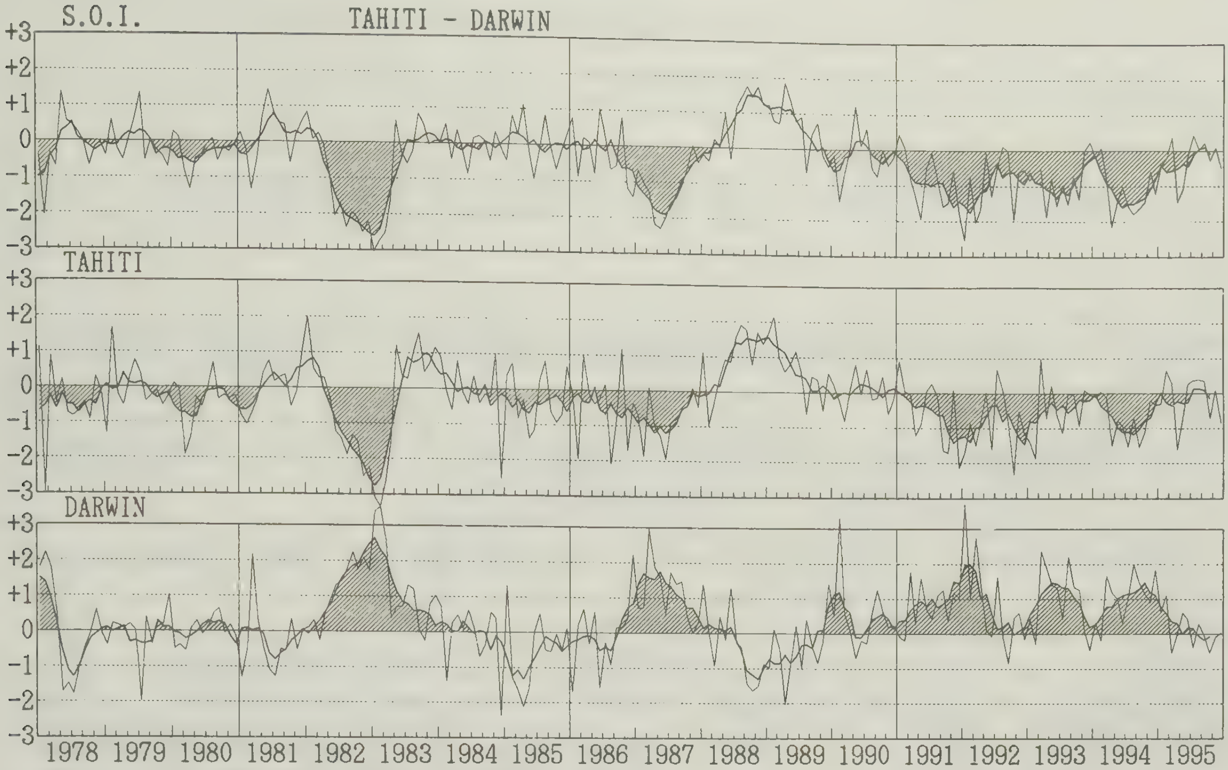
Fig.1 Time series of monthly mean SST anomalies (°C) in the equatorial Pacific Ocean for the areas indicated at the bottom.
Thin lines show the monthly means and thick lines their 5-month running means. Positve anomalies (A, B, C) and negative anomalies (D) are shaded. Anomalies are computed from the JMA climatology (1961−1990).



第2図　太平洋月平均海面水位偏差時系列図

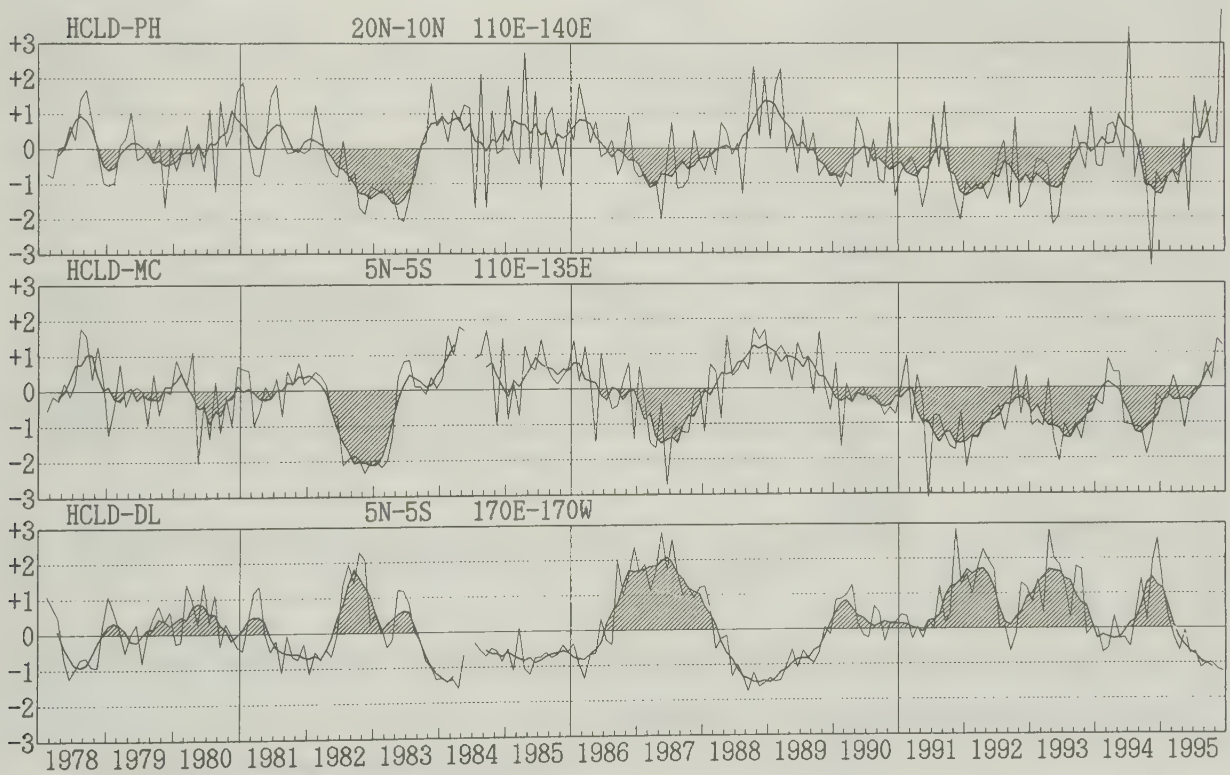
Fig.2 Time series of sea level anomalies computed from 1976−1990 monthly mean values obtained from the stations indicated at the bottom. Thin lines show the monthly mean and thick lines their 5−month running means. Positive anomalies are shaded.

Time Series of SOI and High-Cloud Amount Index



第3図　南方振動指数及び海面気圧偏差時系列図

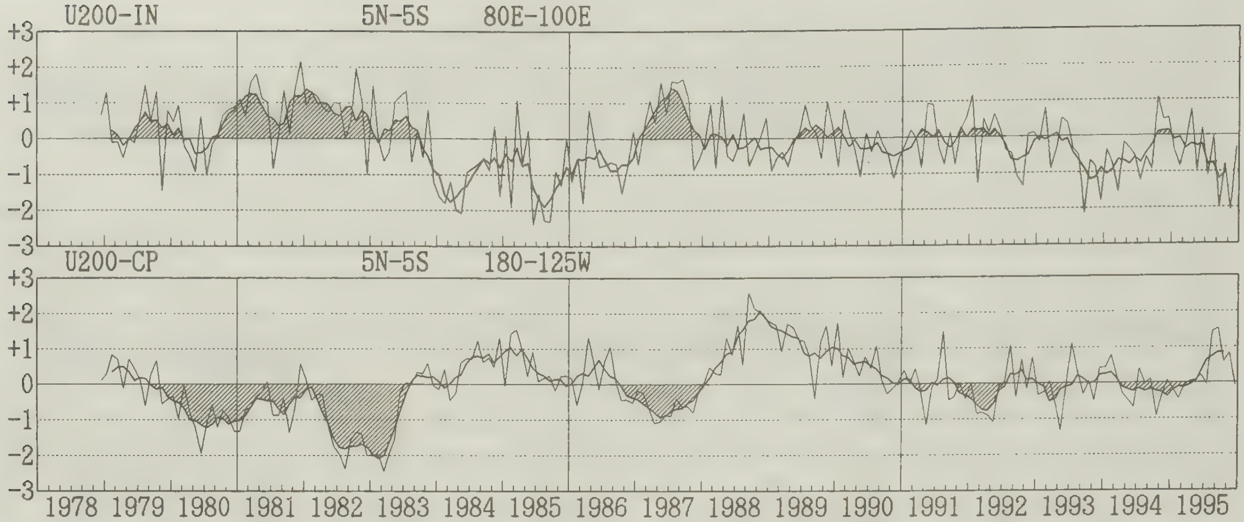
Fig.3 Time series of the Southern Oscilation Index (top) and monthly mean sea level pressure standardized anomalies at Tahiti (middle) and Darwin (bottom). Thin lines show the monthly mean and thick lines their 5-month running means. Negative anomalies (top, middle) and posotive anomalies (bottom) are shaded. Normals and standard deviations are computed from 1961-1990 base periods. Data sources are the Long-range Forecast Division of JMA.



第4図　月平均上層雲量指数時系列図

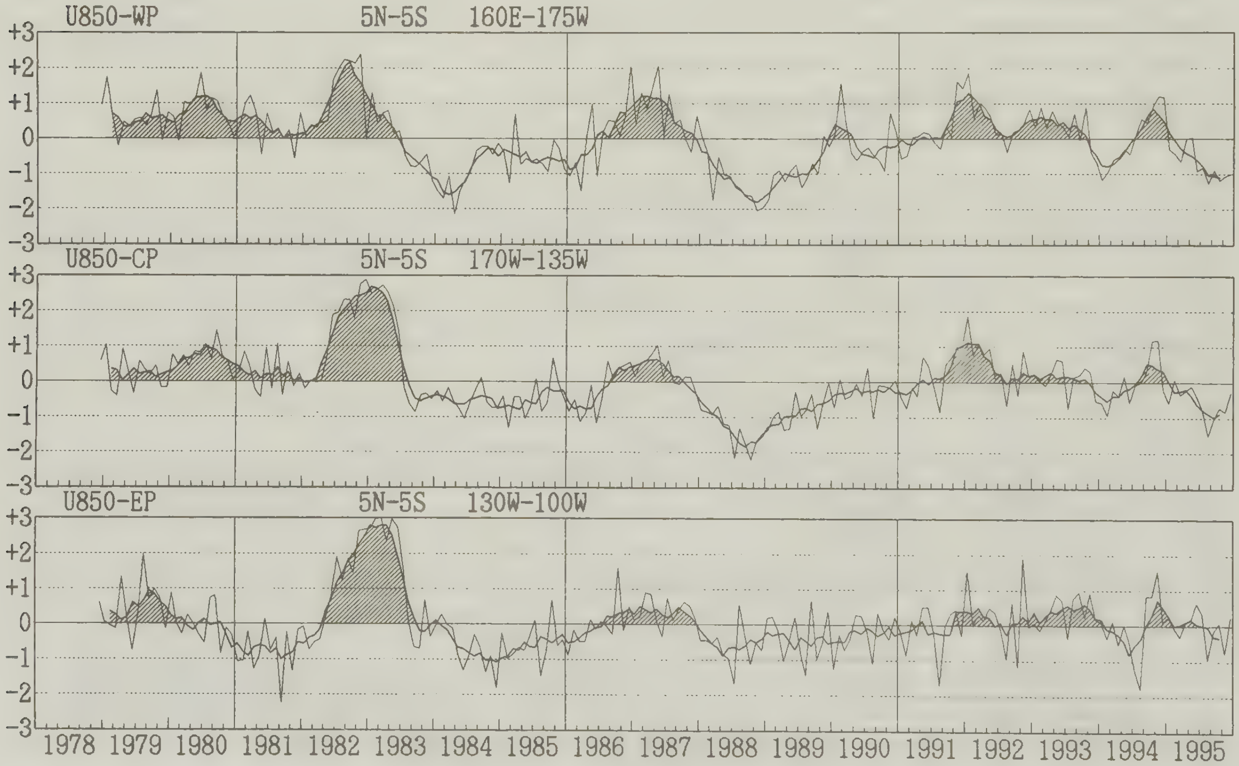
Fig.4 Time series of high-cloud amount index averaged over the area 20° N-10° N, 110° E-140° E (top), 5° N-5° S, 110° E-135° E (middle), and 5° N-5° S, 170° E-170° W (bottom). Thin lines show the monthly mean and thick lines their 5-month running means. Negative anomalies (top, middle) and positive anomalies (bottom) are shaded. Normals and standard deviations are computed from 1978-1990 base periods. Data sources are the Long-range Forecast Division of JMA.

Time Series of Zonal Wind Index



第5図-1　赤道域東西風指数(200ｈＰａ)時系列図

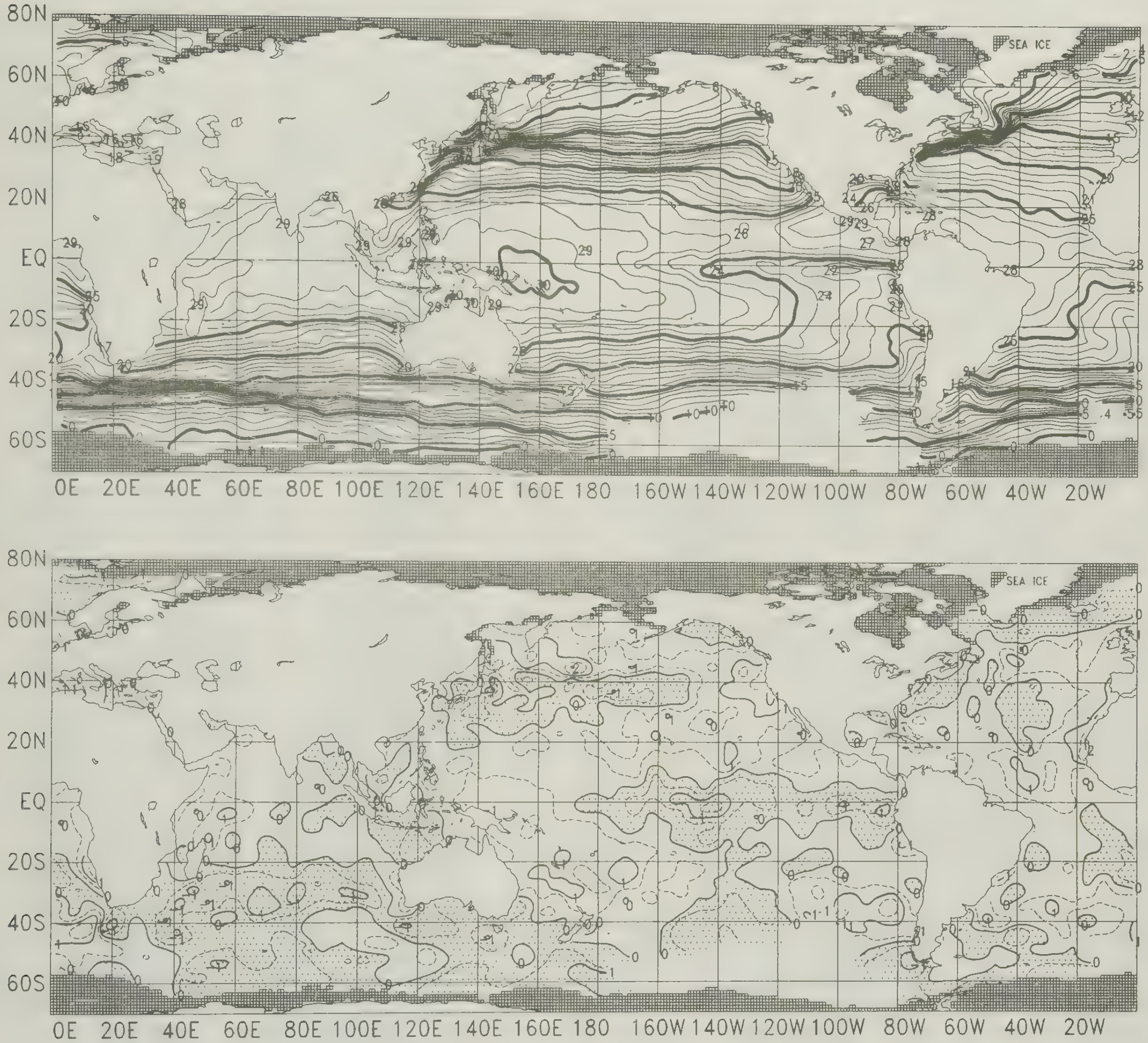
Fig.5−1 Time series of 200hPa zonal wind index averaged over the areas of 5° N−5° S, 80° E−100° E (top), and 5° N−5° S, 180° −125° W (bottom).
Thin lines show the monthly mean and thick lines their 5−month running means.
Positive anomalies (top) and negative anomalies (bottom) are shaded.
Normals and standard deviations are computed from 1979−1990 base periods.
Data sources are the Long−range Forecast Division of JMA.



第5図-2　赤道域東西風指数(850ｈＰａ)時系列図

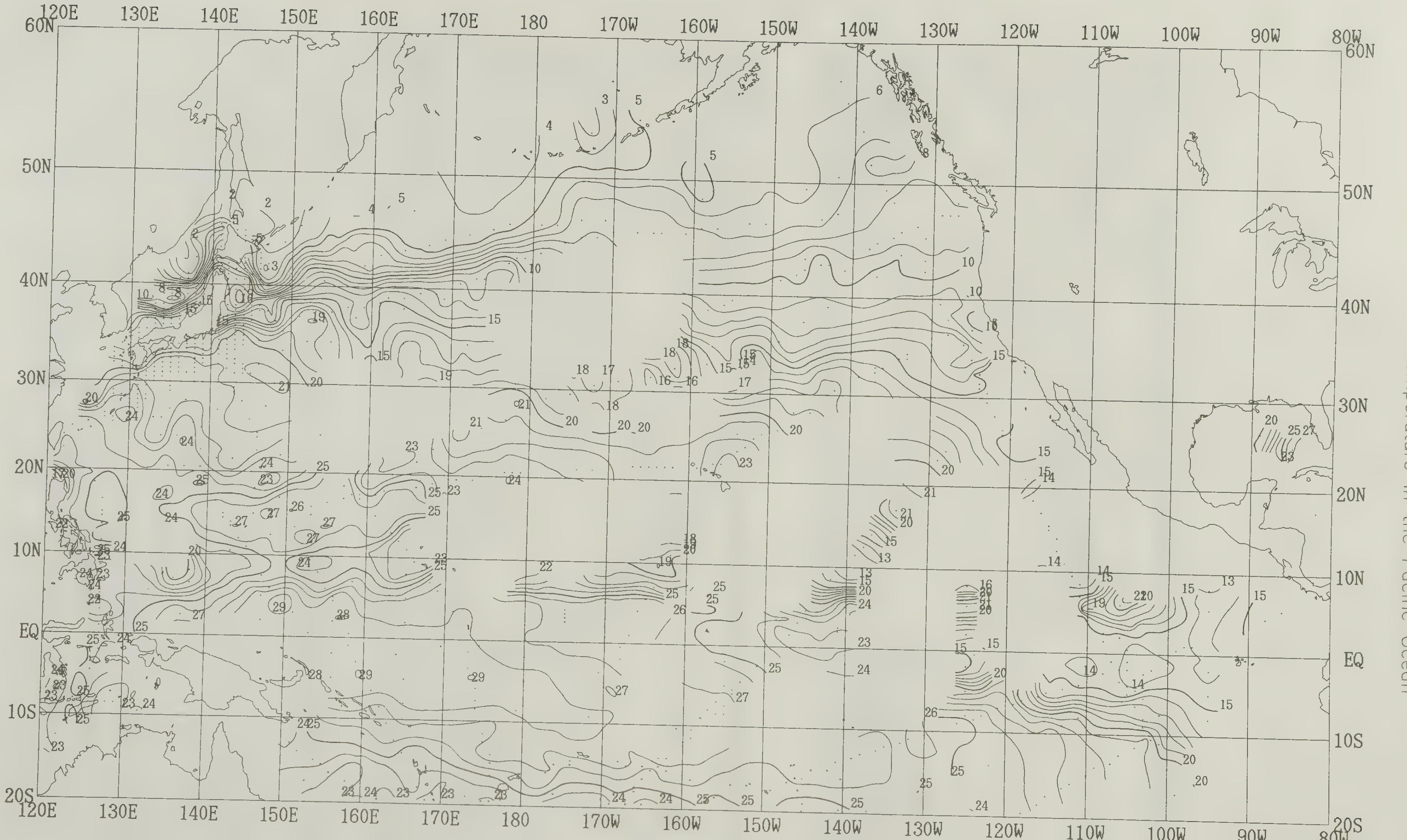
Fig.5−2 Time series of 850hPa zonal wind index averaged over the areas of 5° N−5° S, 160° E−175° W (top), 5° N−5° S, 170° W−135° W (middle), and 5° N−5° S, 130° W−100° W (bottom). Thin lines show the monthly mean and thick lines their 5−month running means. Positive anomalies are shaded.
Normals and standard deviations are computed from 1979−1990 base periods.
Data sources are the Long−range Forecast Division of JMA.

SST & Anomalies in the Global Ocean



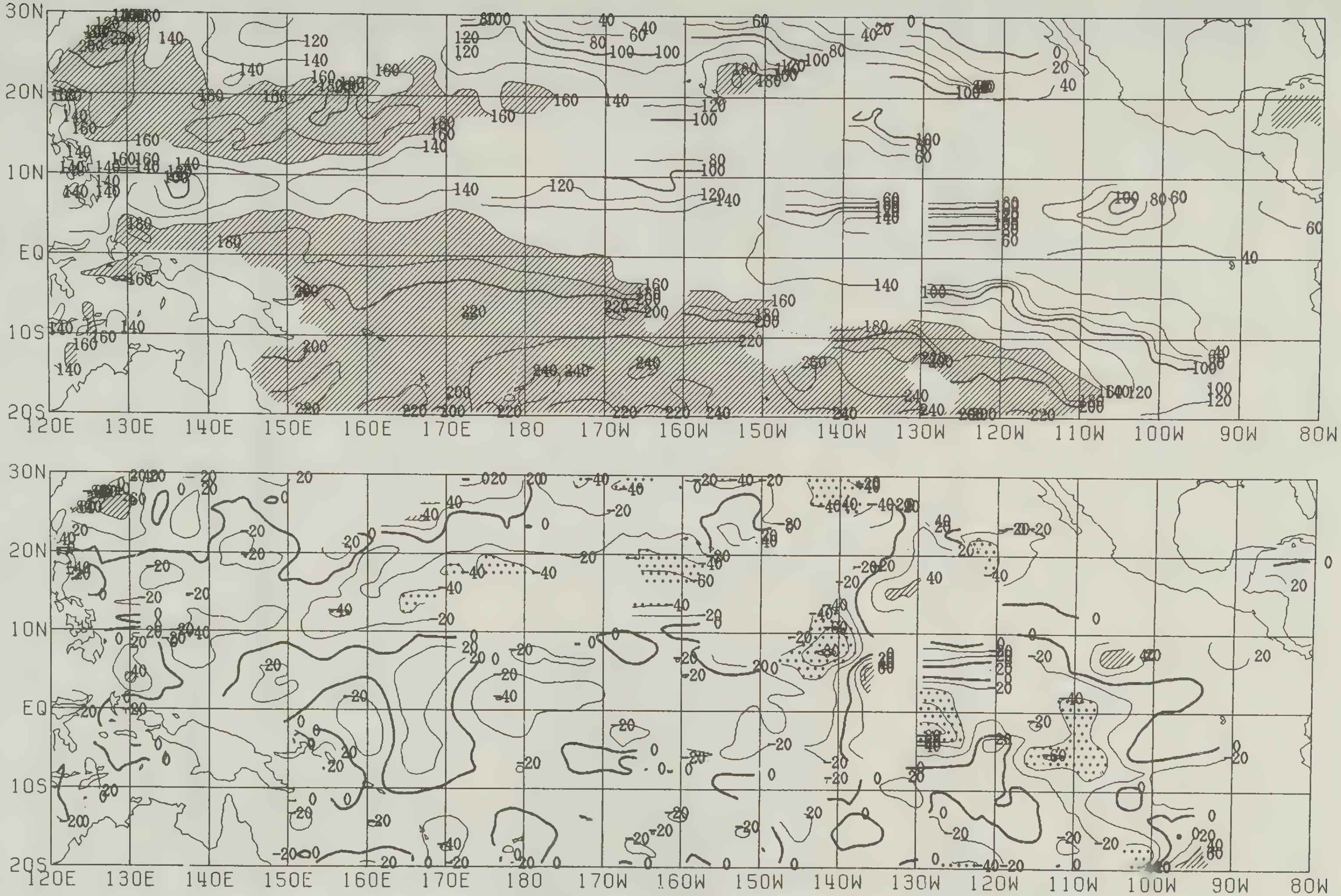
第6図　全球月平均海面水温図（上）及び偏差図（下）（1995年12月）

Fig.6 Monthly mean sea surface temperature over the global ocean (top) and anomalies (bottom) for DEC 1995. Anomalies are computed from the JMA climatology (1961–1990) (Marine Department of JMA, 1991, Climatic charts of sea surface temperatures of the western North Pacific and the global ocean). Contour interval is 1°C (top) and additional anomaly contours of ±0.5°C are shown as broken lines. Negative anomalies are spotted. Maximum coverage of sea ice is shaded. Data sources for sea ice are U.S. National Ice Center (polar regions) and JMA (the Sea of Okhotsk).



第7図　太平洋表層水温(深さ100m)図 (1995年12月)

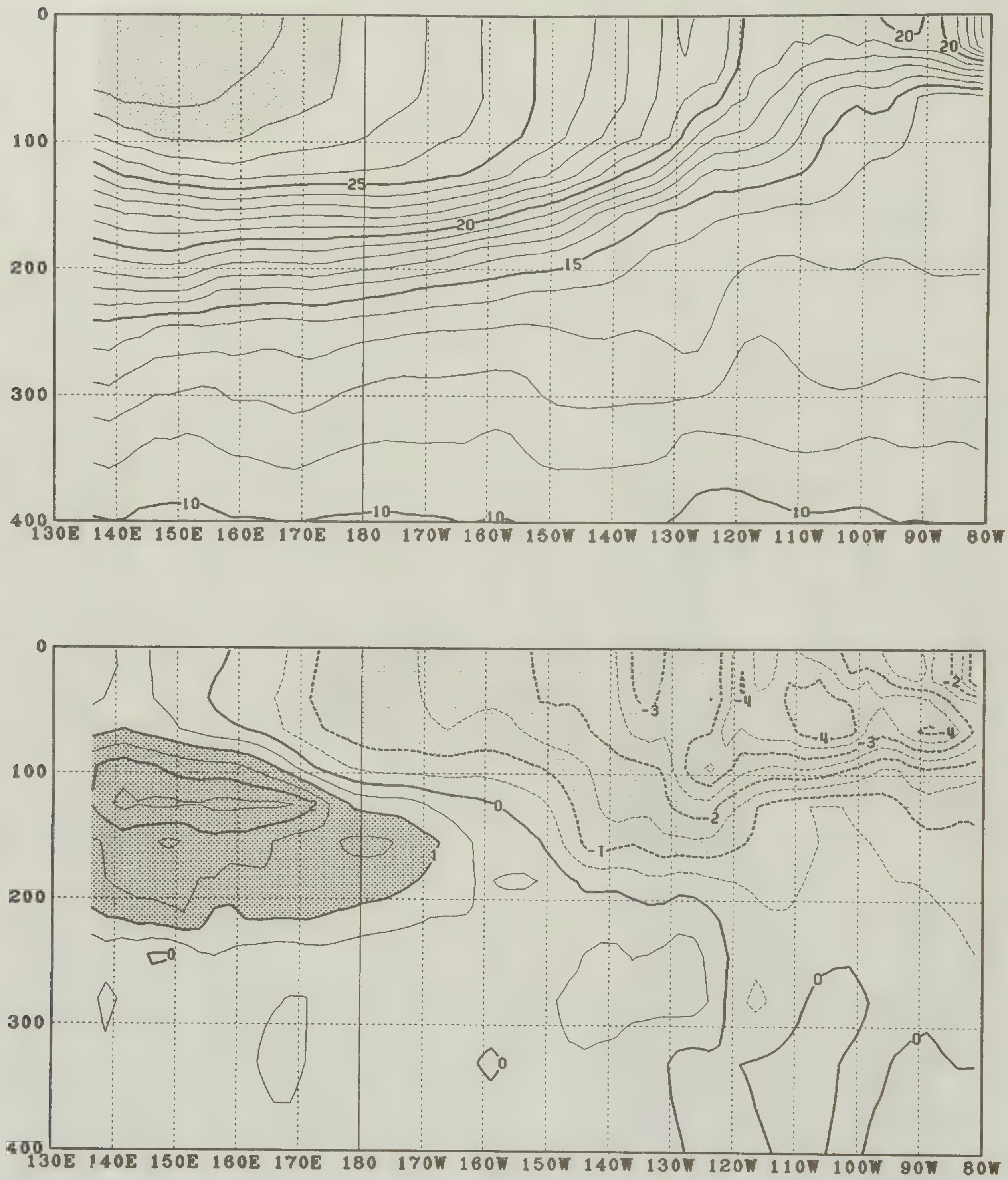
Fig.7　Subsurface (100m) temperatures in the Pacific Ocean for DEC 1995
Contour interval is 1° C.　Observation points are denoted by dots.



第8図　太平洋表層水温（20℃深度）図（上）及び偏差図（下）（1995年12月）

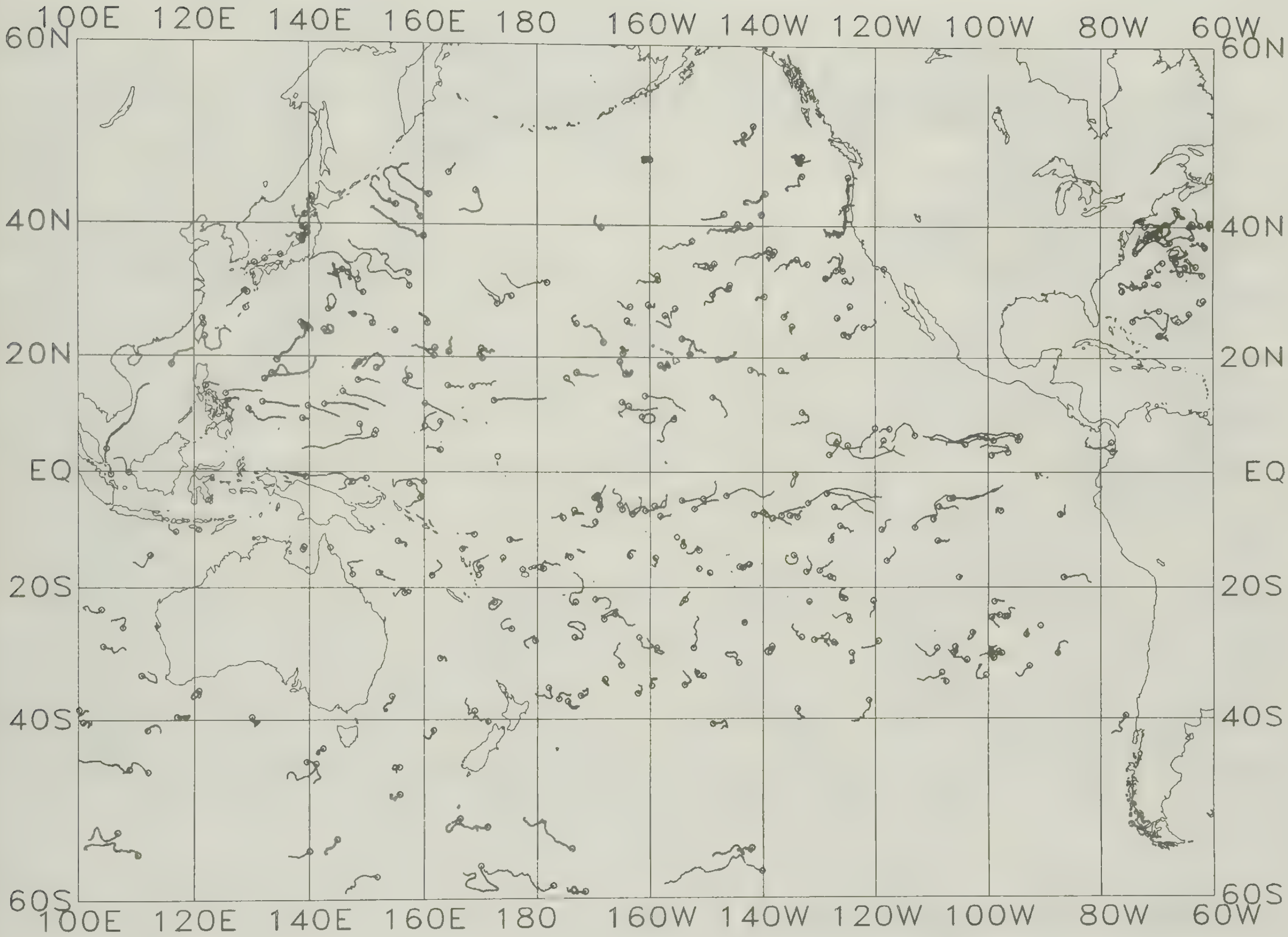
Fig.8　Depth of the 20° C isotherm in the Pacific Ocean (top) and anomalies (bottom) for DEC 1995.　Anomalies are computed from the climatology (Levitus, 1982, Climatological Atlas of the World Ocean, NOAA).　Contour interval is 20m.　Values greater than 160m in top panel are shaded.　In bottom panel values greater than +40m are shaded and values less than −40m are spotted.

Depth−Longitude Section of Equatorial Temperature & Anomalies



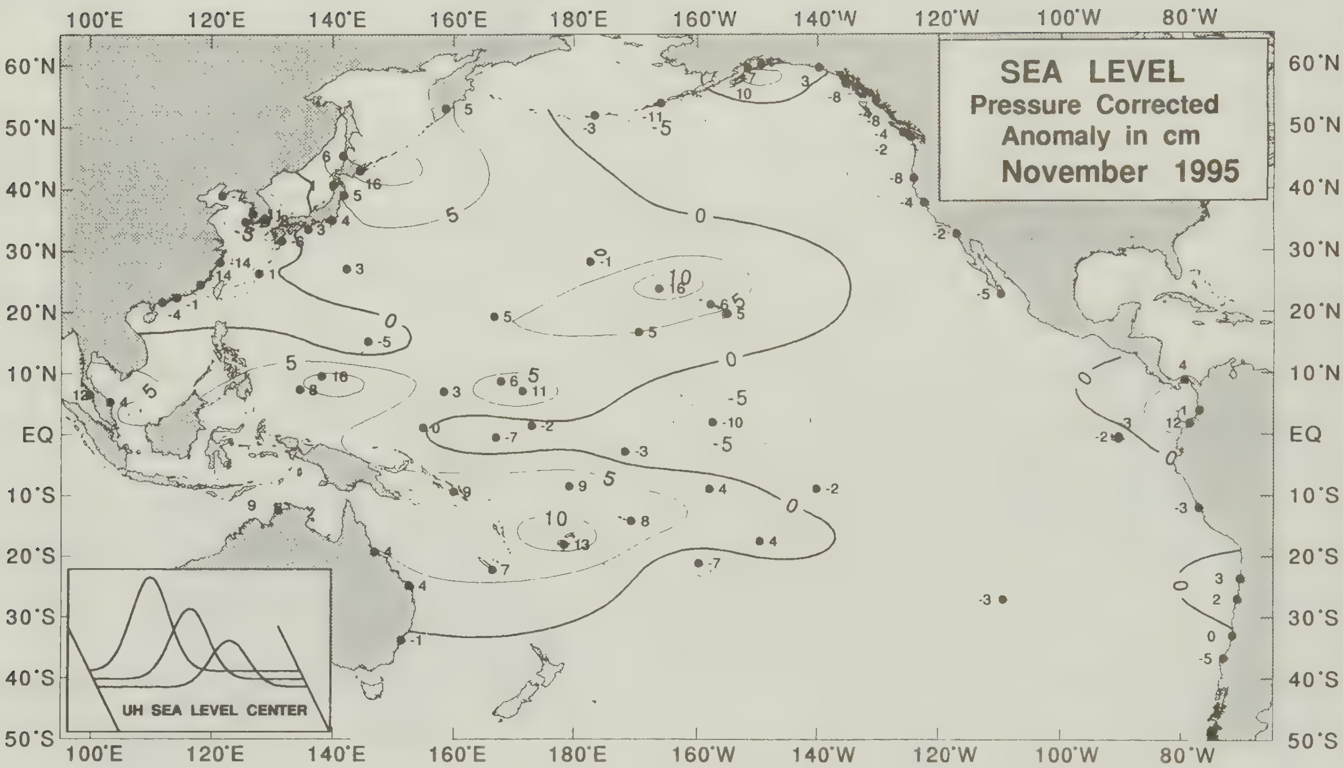
第9図　太平洋赤道に沿う表層水温（上）及び偏差（下）の深度－経度断面図（1995年12月）

Fig.9　Depth−longitude sections of temperature (top) and anomalies (bottom) along the equator in the Pacific Ocean for DEC 1995. Data are derived from the Ocean Data Assimilation System of JMA. Contour interval is 1° C (top) and 0.5° C (bottom). Values greater than 28° C in top panel are shaded. In bottom panel values greater than 1° C are shaded and values less than −1° C are spotted. Anomalies are computed from 1987−1994 base period means.



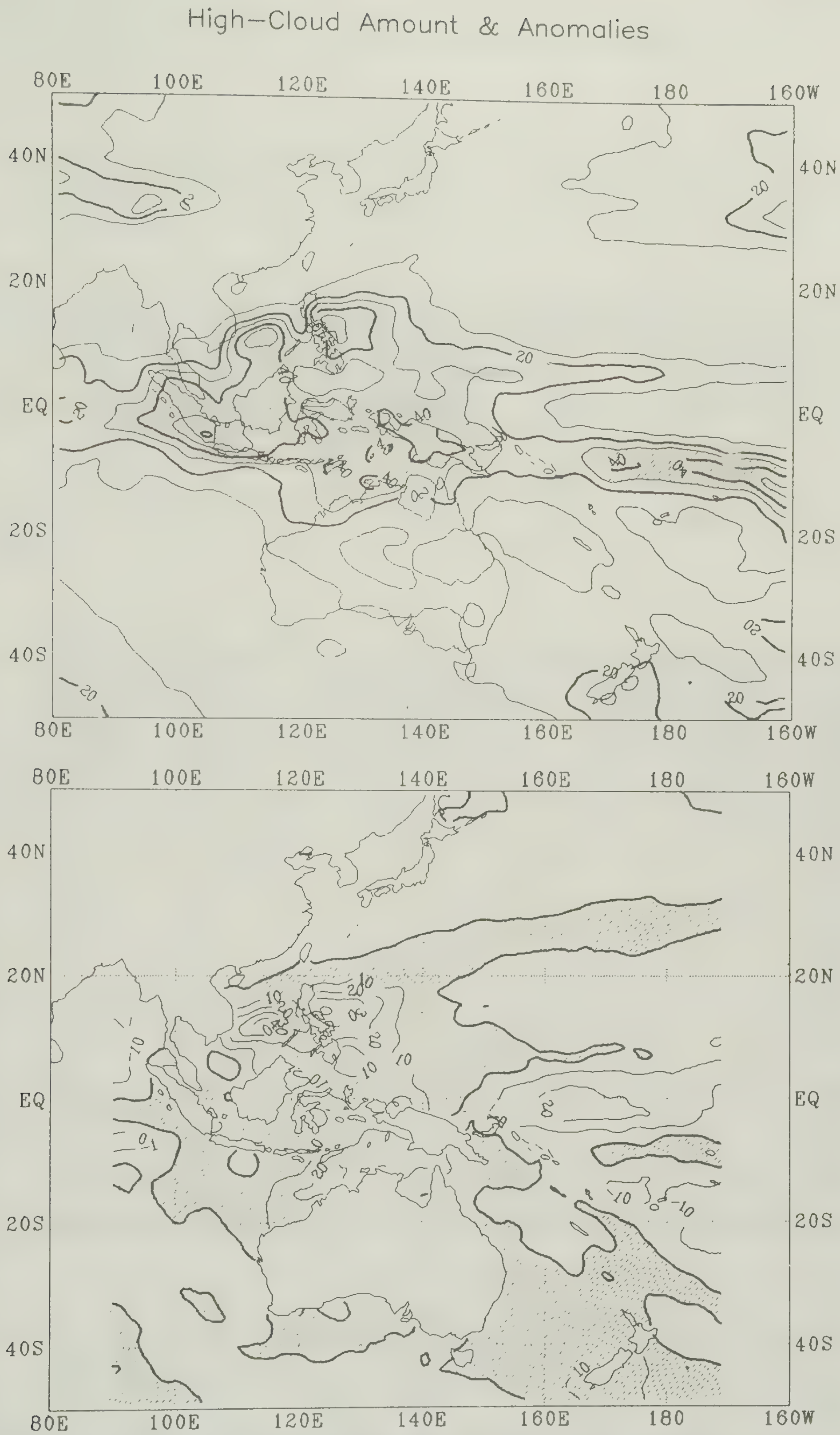
第10図　太平洋ブイ流跡図(1995年12月)

Fig.10　Movements of drifting buoys in the Pacific Ocean during DEC 1995.　Each track is for one buoy. Small circles represent last positions for the month.



第11図　太平洋海面水位偏差図（ 1995年11月 ）

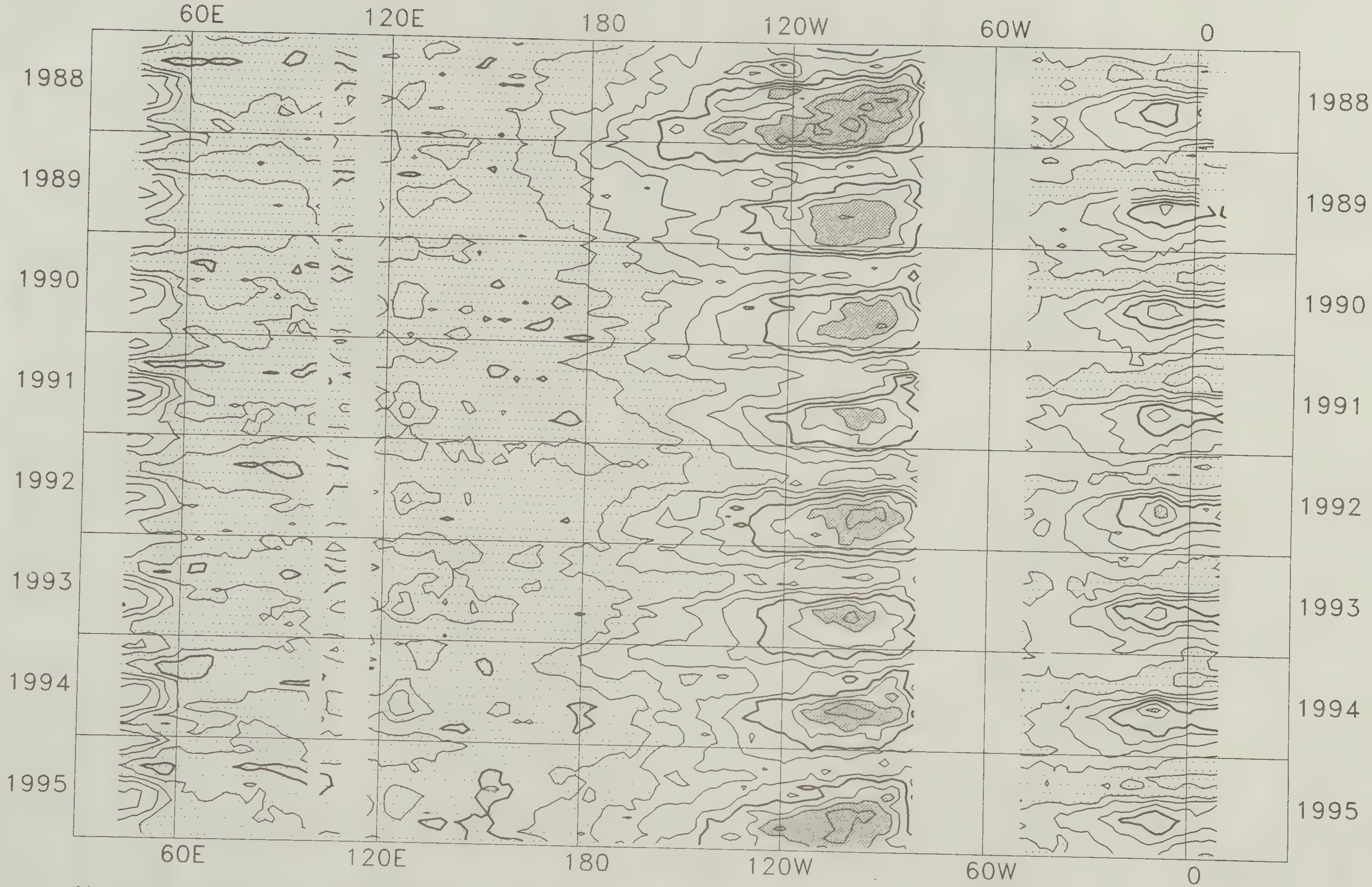
Fig.11 Monthly sea level anomalies for NOV 1995 obtained from mean sea level (1975−1986) adjusted for atmospheric pressure.
This figure is prepared by the SOC of ISLP−PAC, Dept. of Oceanography, Univ. of Hawaii.



第12図　西太平洋月平均上層雲量分布図及び偏差図（1995年12月）

Fig.12 Monthly mean of the high-cloud amount (%, top) and its anomalies (%, bottom) in the western Pacific for DEC 1995. Contour interval is 10%. Areas above 30% are shaded (top) and positive anomalies are stippled (bottom). Anomalies are computed from 1978-1990 base period means. Figures are prepared by the Long-range Forecast Division of JMA.

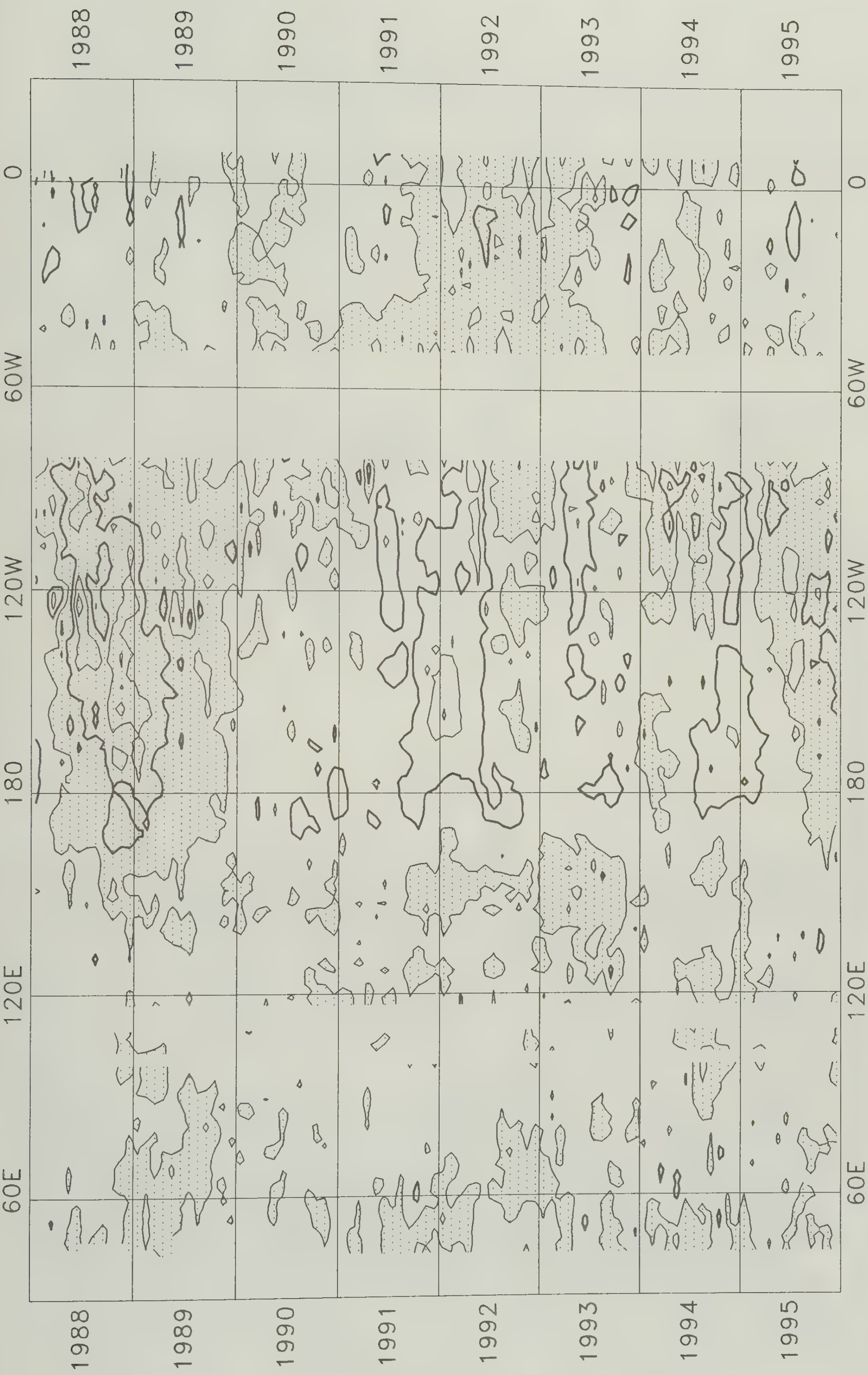
Time–Longitude Section of SST



第13図　赤道に沿う海面水温の時間－経度断面図

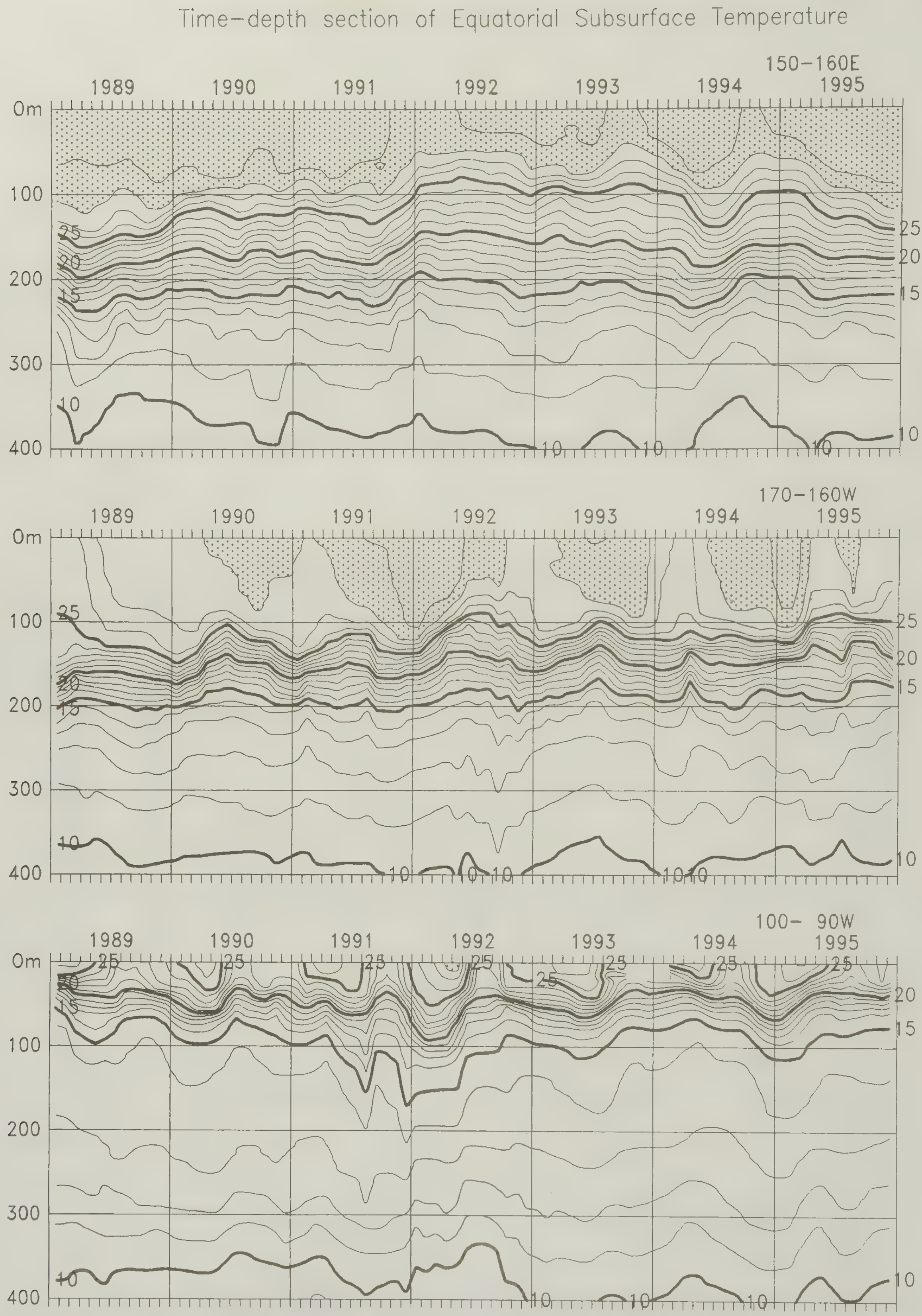
Fig.13 Time–longitude section of SSTs along the equator (2° N–2° S) in the global ocean. Contour interval is 1° C, with thick contour lines at 25 and 30° C. SST values greater than 28° C are spotted and values less than 23° C are shaded.

Time–Longitude Section of SST Anomalies



第14図　赤道に沿う海面水温偏差の時間－経度断面図

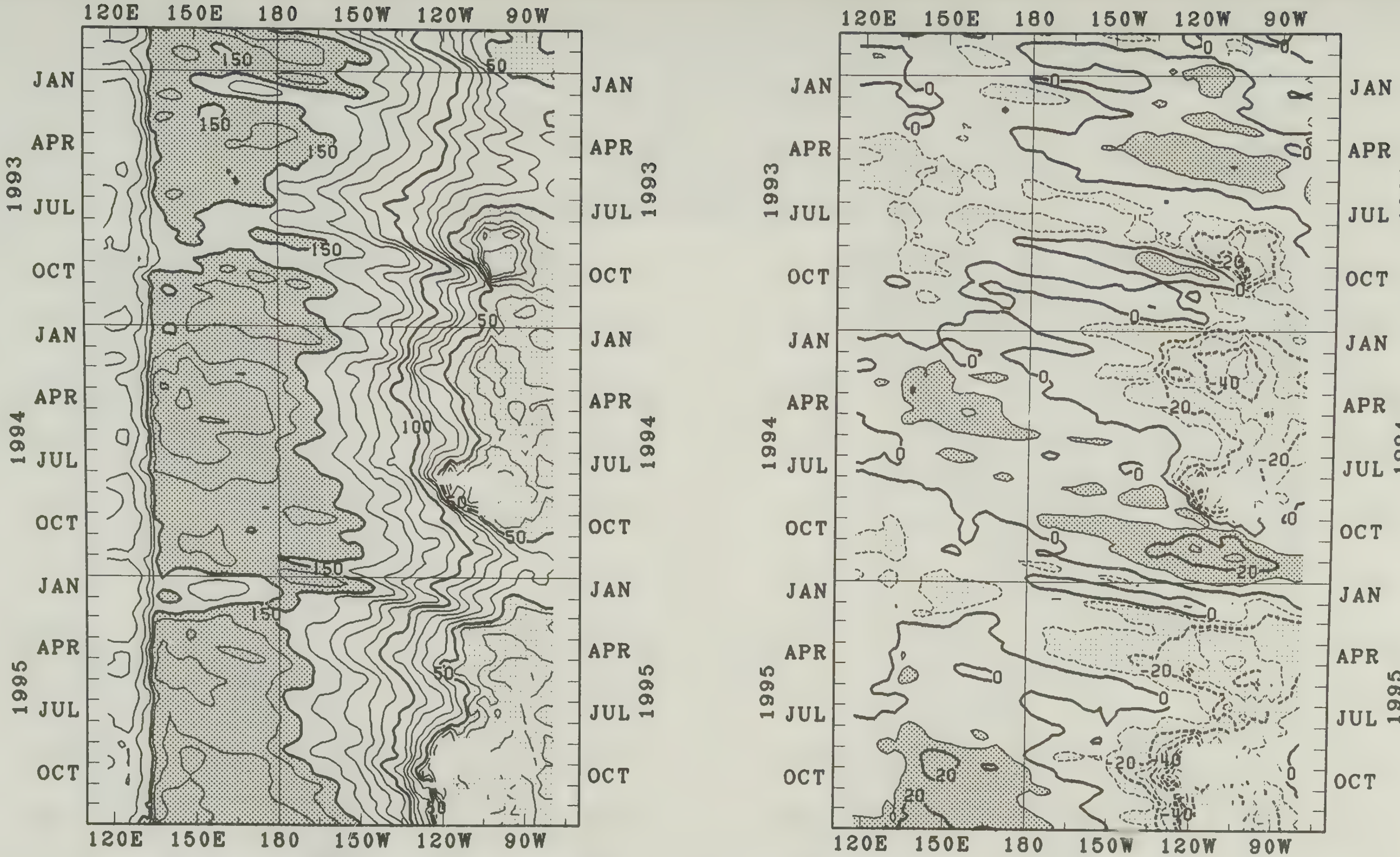
Fig.14 Time–longitude section of SST anomalies along the equator (2° N–2° S) computed from the JMA climatology (1961–1990). Contour interval is 1° C, with thick contour lines at +1° C and −1° C. Negative anomalies are spotted.



第15図　太平洋赤道域の表層水温の時間－深度断面図
（上：西部、中：中部、下：東部）

Fig.15 Time-depth section of equatorial (2° N-2° S) subsurface temperature for the western Pacific (top, 150-160° E), the central Pacific (middle, 170-160° W) and the eastern Pacific (bottom, 100-90° W). Contour interval is 1° C. Values greater than 28° C are shaded.

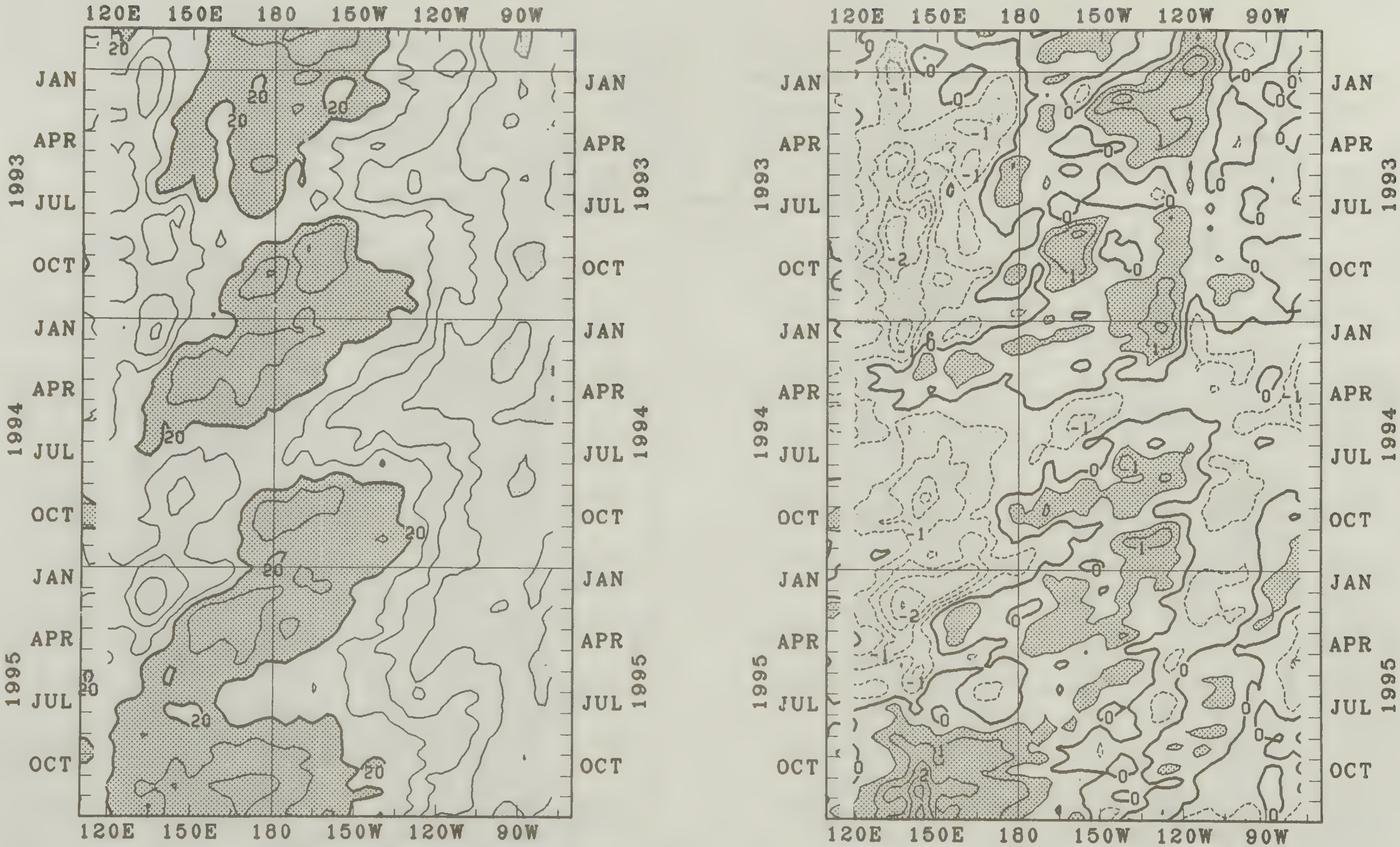
Time−Longitude Section of Depth of 20° C & Anomalies



第16図　太平洋の赤道に沿う20℃深度（左）及び偏差（右）の時間−経度断面図

Fig.16 Time−longitude sections of depth of the 20° C isotherm along the equator (left) and anomalies (right) in the Pacific Ocean. Data are derived from the Ocean Data Assimilation System of JMA. Contour interval is 10m. Values in left panel greater than 150m are shaded and values less than 50m are spotted. Dashed contours in right panel indicate negative anomalies. Anomalies are computed from 1987−1994 base period means.

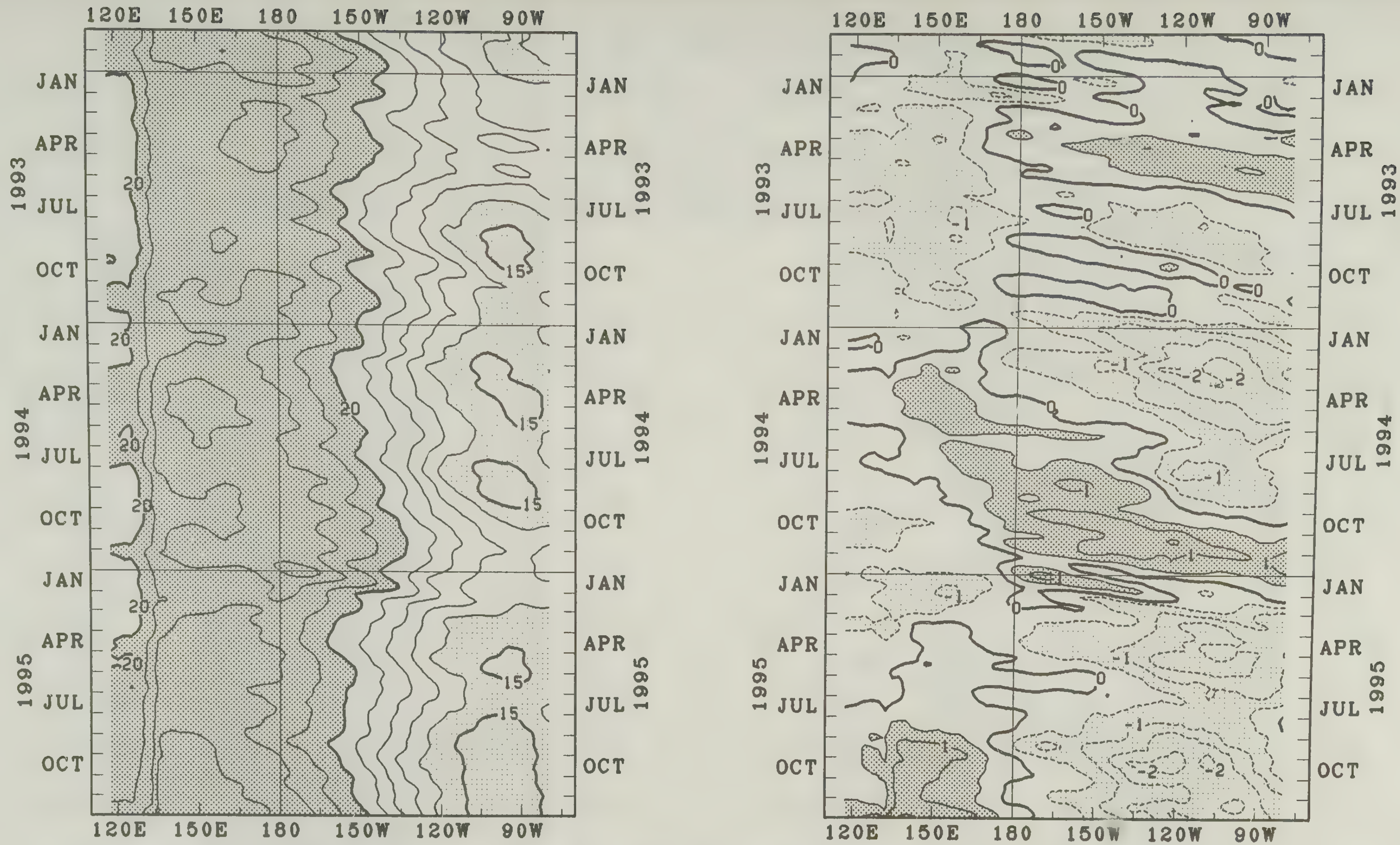
Time-Longitude Section of Ocean Heat Content & Anomalies (6° N)



第17図　太平洋の北緯6度線に沿う海洋表層の貯熱量（左）及び偏差（右）の時間－経度断面図

Fig.17 Time-longitude sections of ocean heat content in the upper 260m along 6° N (left) and anomalies (right) in the Pacific Ocean. Data are derived from an Ocean Data Assimilation System of JMA. Contour interval is 1° C (left) and 0.5° C (right). Values in the left panel greater than 20° C are shaded and values less than 16° C are spotted. Dashed contours in right panel indicate negative anomalies. Anomalies are computed from 1987–1994 base period means.

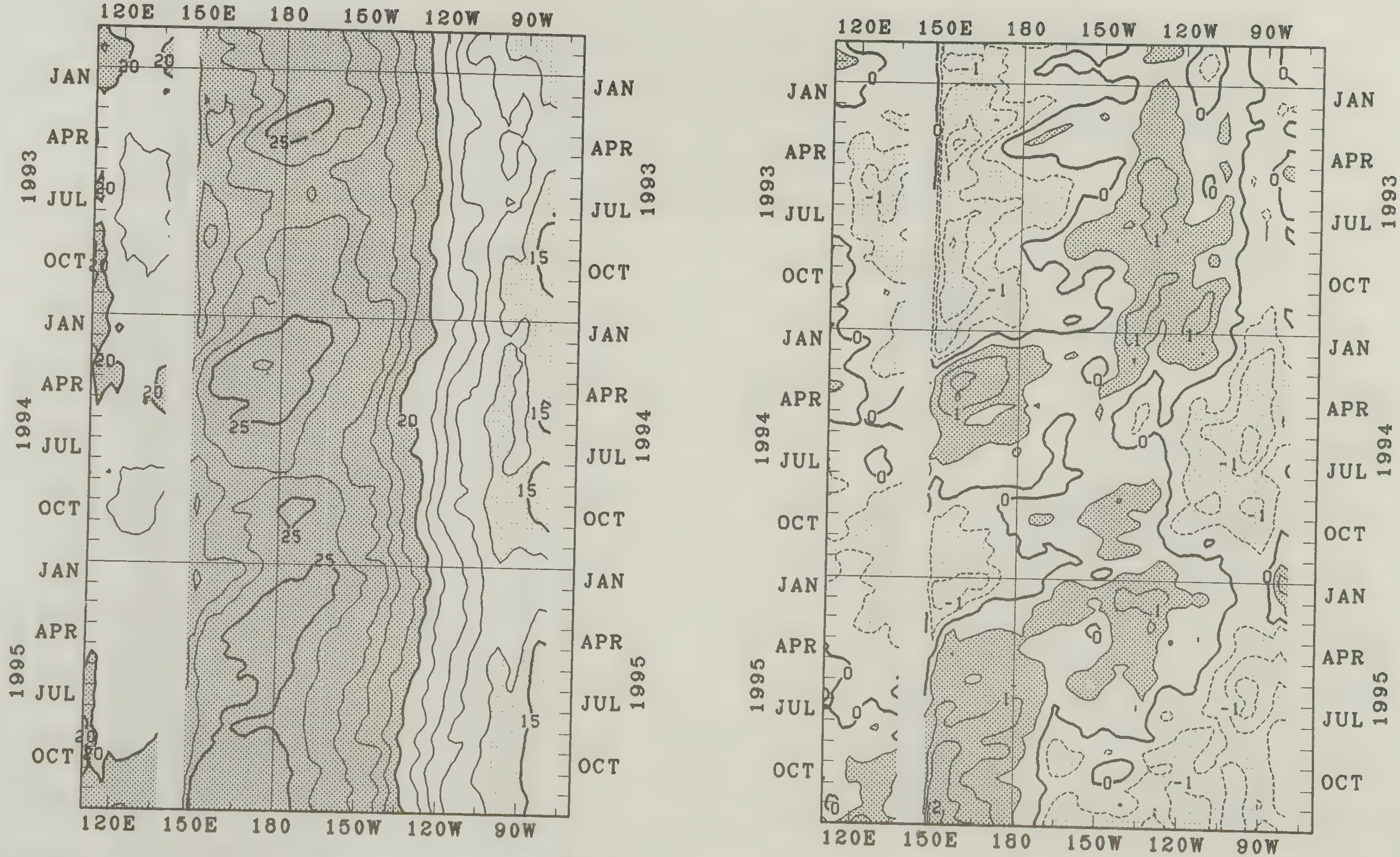
Time–Longitude Section of Ocean Heat Content & Anomalies (Eq.)



第18図　太平洋の赤道に沿う海洋表層の貯熱量（左）及び偏差（右）の時間－経度断面図

Fig.18 Time–longitude sections of ocean heat content in the upper 260m along the equator (left) and anomalies (right) in the Pacific Ocean. Data are derived from the Ocean Data Assimilation System of JMA. Contour interval is 1° C (left) and 0.5° C (right). Values in the left panel greater than 20° C are shaded and values less than 16° C are spotted. Dashed contours in right panel indicate negative anomalies. Anomalies are computed from 1987–1994 base period means.

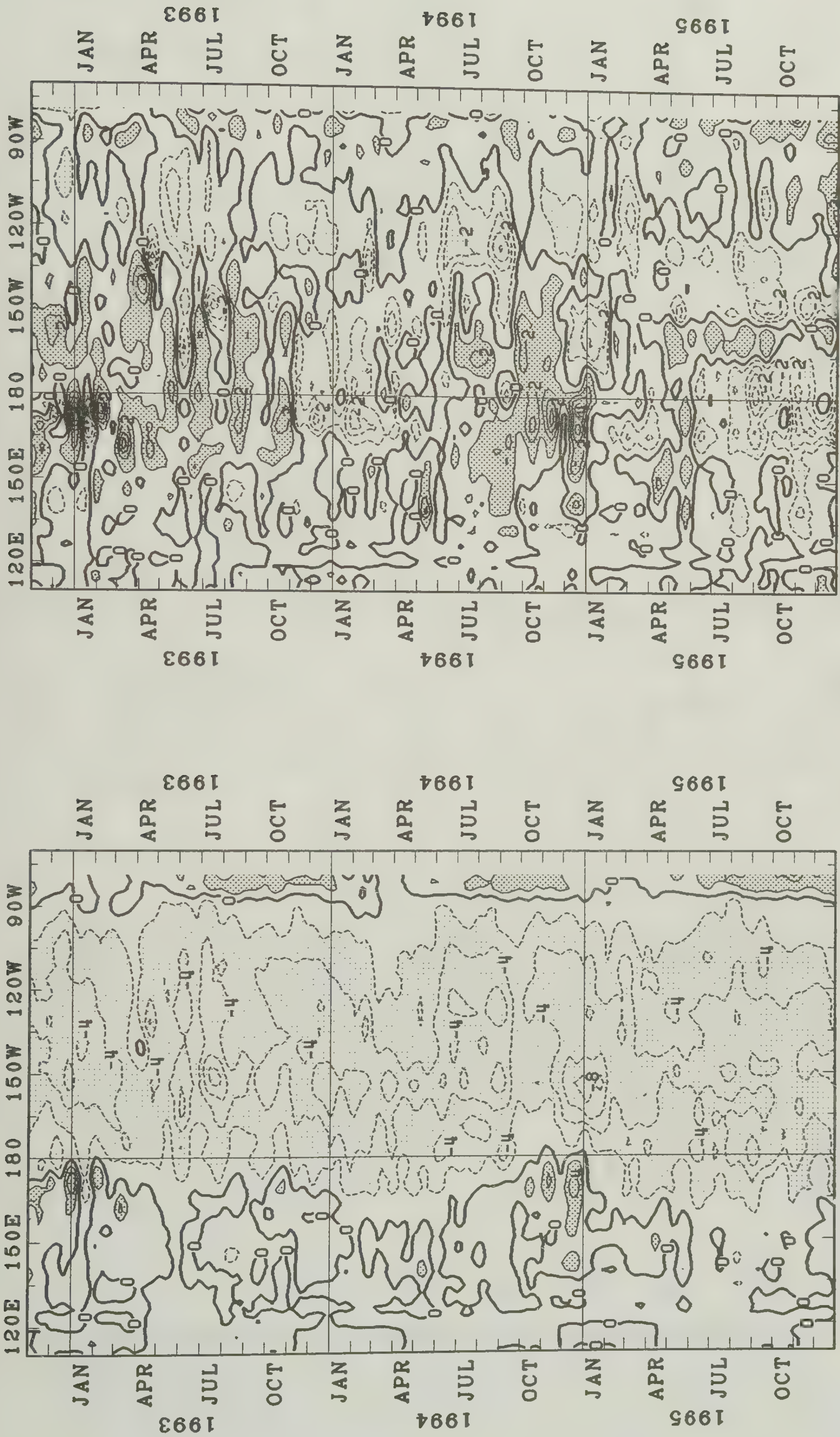
Time–Longitude Section of Ocean Heat Content & Anomalies (6° S)



第19図　太平洋の南緯6度線に沿う海洋表層の貯熱量（左）及び偏差（右）の時間－経度断面図

Fig.19 Time–longitude sections of ocean heat content in the upper 260m along 6° S (left) and anomalies (right) in the Pacific Ocean. Data are derived from the Ocean Data Assimilation System of JMA. Contour interval is 1° C (left) and 0.5° C (right) Values in the left panel greater than 20° C are shaded and values less than 16° C are spotted. Dashed contours in right panel indicate negative anomalies. Anomalies are computed from 1987–1994 base period means.

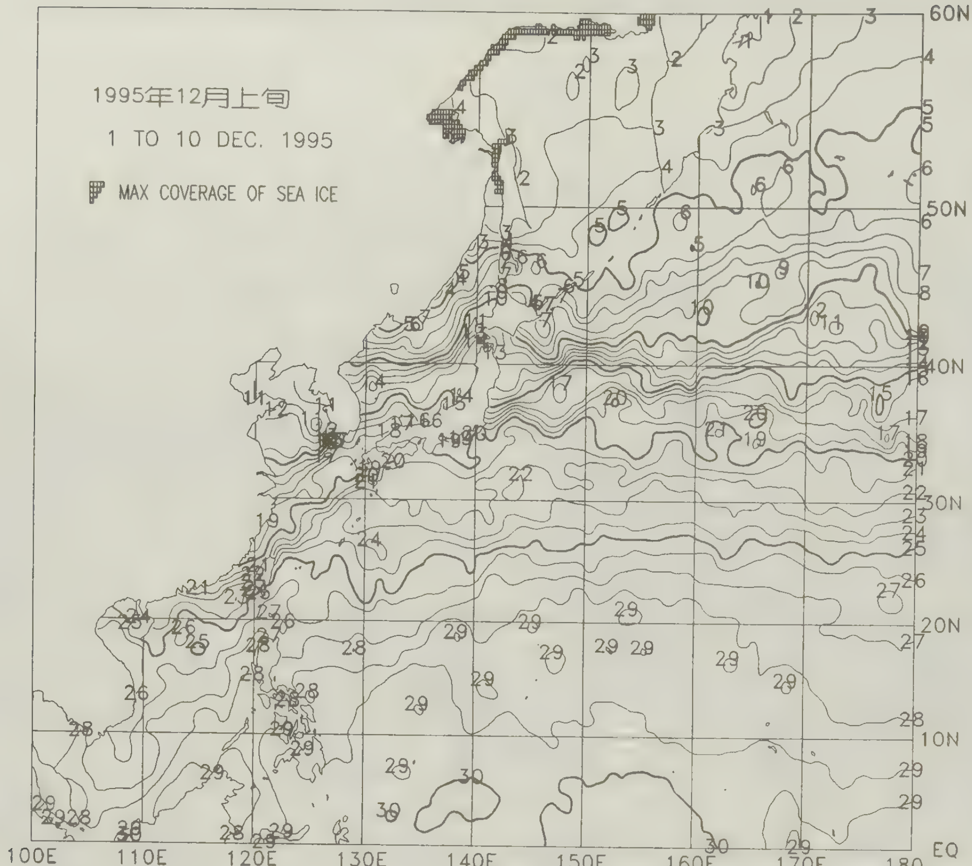
Time-Longitude Section of Surface Zonal Wind Stress & Anomalies



第20図 太平洋の赤道に沿う海面の風応力の東西成分（左）及び偏差（右）の時間－経度断面図

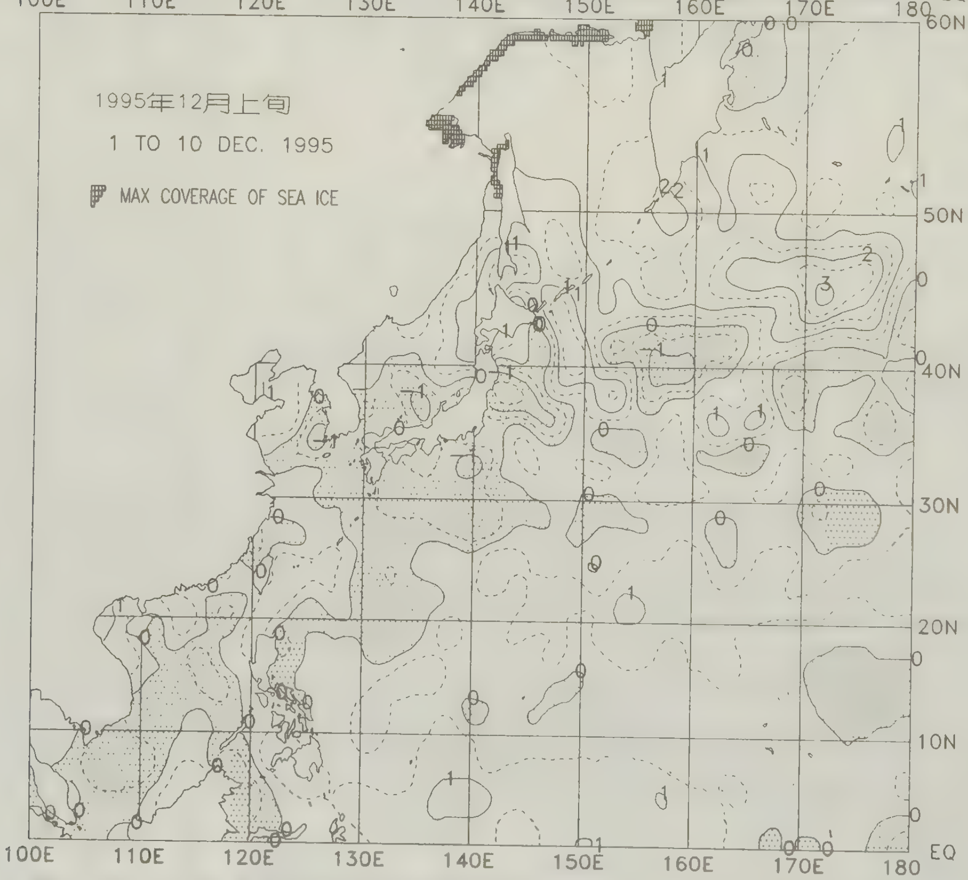
Fig.20 Time-longitude sections of surface zonal wind stress along the equator (left) and anomalies (right) in the Pacific Ocean. Data are derived from the Atmospheric Global Data Assimilation System of JMA. Contour interval is 0.02N/m2 (left) and 0.01N/m2 (right). Dashed contours indicate easterlies (left) and easterly anomalies (right). Anomalies are computed from 1987–1994 base period means.

Ten-day mean SST & Anomalies



旬平均沿岸水温(℃)
Coastal Water Temperature

地点名 (Index Number)	水温 Temp.	偏差 Anom.
石垣島 (47918)	23.2	+0.8
御前崎 (47655)	15.2	+0.9
八丈島 (47678)	16.9	−3.1
小名浜 (47598)	14.4	+0.6
宮　古 (47585)	12.9	+0.1
江　差 (47428)	10.0	−
浜　田 (47755)	14.9	−



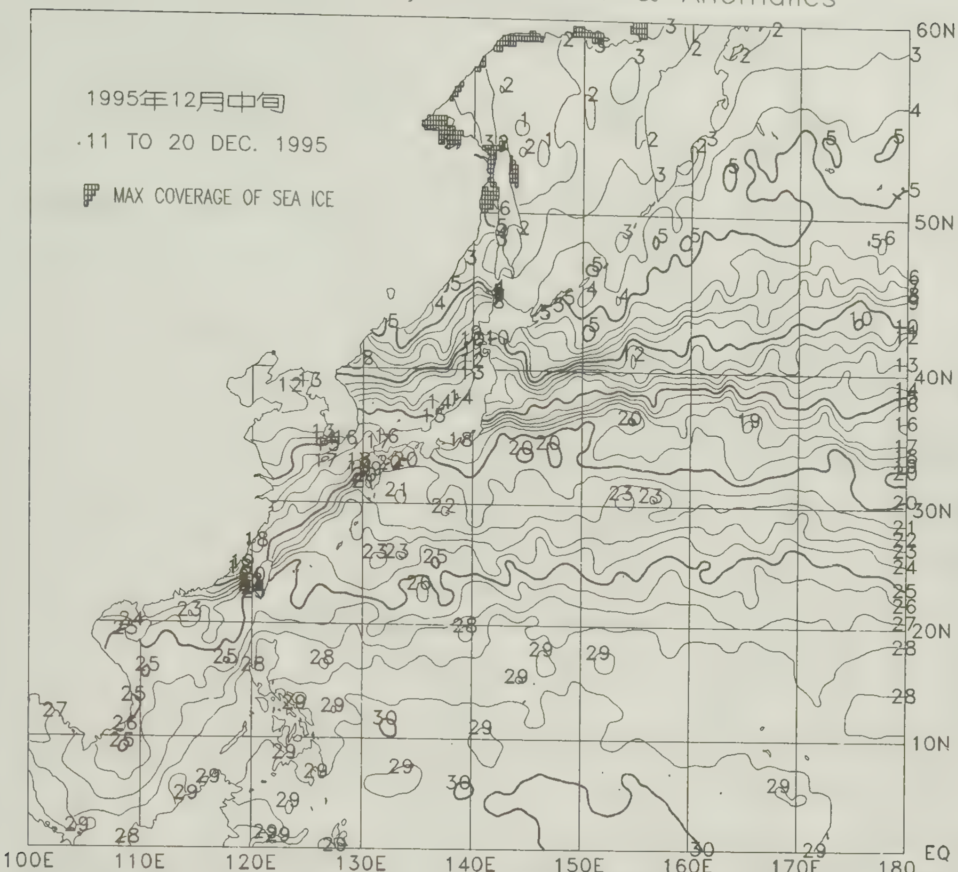
海洋気象ブイロボット
旬平均海面水温(℃)
Ocean Data Buoy SST

日本海	37.9N,134.5E	12.3
四国沖	29.0N,135.0E	22.1
東シナ海	28.2N,126.3E	23.4

第21図 北西太平洋旬平均海面水温図(上)及び偏差図(下)(1995年12月上旬)

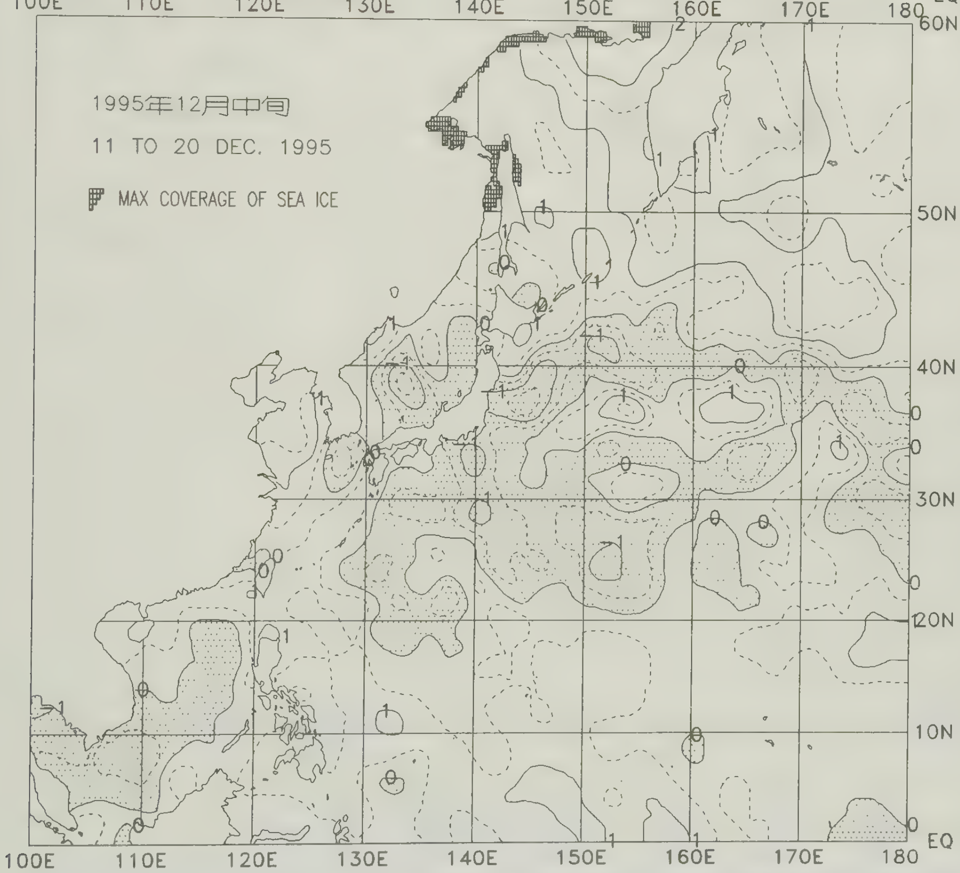
Fig.21 Ten-day mean SSTs in the western North Pacific (top) and anomalies (bottom) for the 1st ten-day period in DEC 1995. Anomalies are computed from the JMA climatology (1961−90). Contour interval is 1°C and additional anomaly contours of 0.5°C are shown as broken lines. Negative anomalies are spotted.

Ten-day mean SST & Anomalies



旬平均沿岸水温(℃)
Coastal Water Temperature

地点名 (Index Number)	水温 Temp.	偏差 Anom.
石垣島(47918)	23.4	+1.6
御前崎(47655)	14.8	+1.3
八丈島(47678)	16.6	−2.8
小名浜(47598)	12.9	−0.2
宮古(47585)	11.9	+0.2
江差(47428)	6.3	−
浜田(47755)	14.2	−



海洋気象ブイロボット
旬平均海面水温(℃)
Ocean Data Buoy SST

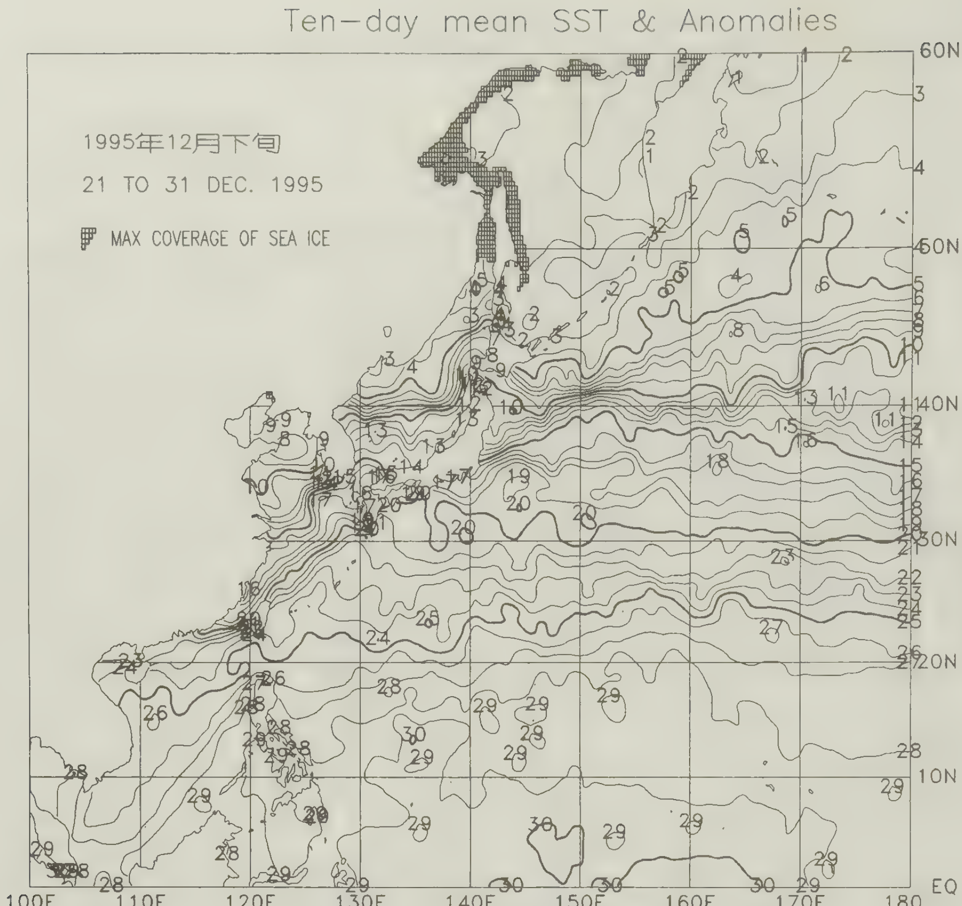
日本海 37.9N,134.5E
11.5

四国沖 29.0N,135.0E
21.3

東シナ海 28.2N,126.3E
23.5

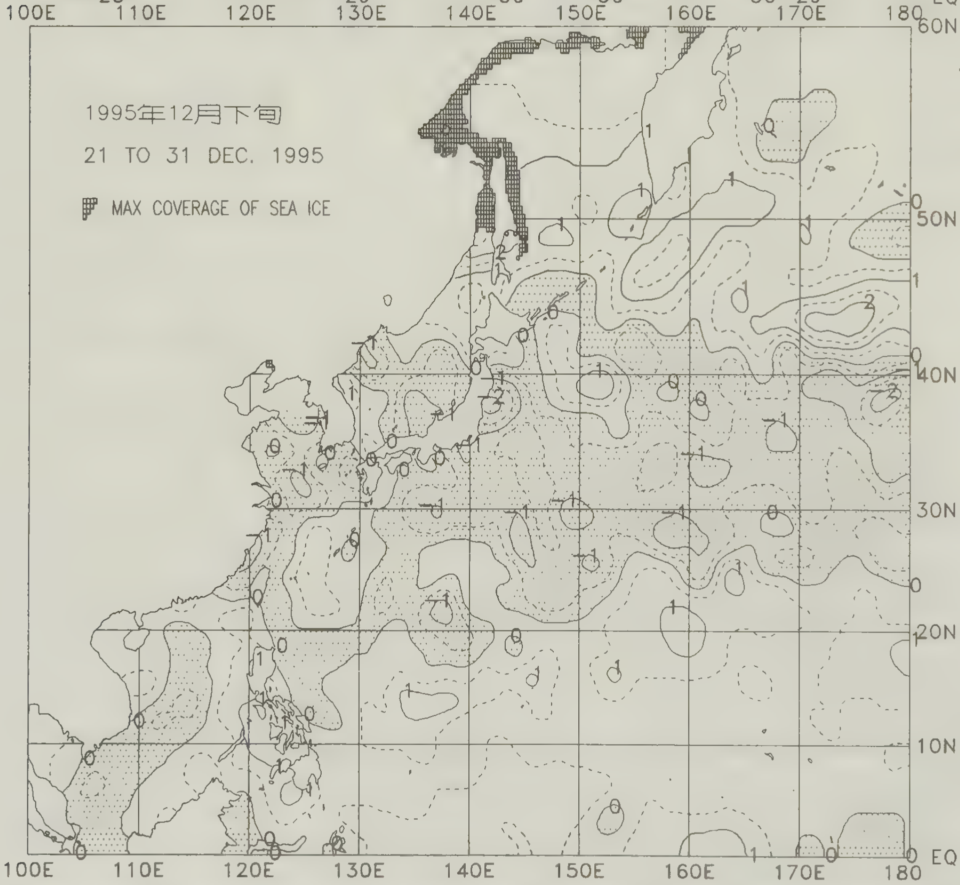
第22図 北西太平洋旬平均海面水温図(上)及び偏差図(下)(1995年12月中旬)

Fig.22 Ten-day mean SSTs in the western North Pacific (top) and anomalies (bottom) for the 2nd ten-day period in DEC 1995. Anomalies are computed from the JMA climatology (1961−90). Contour interval is 1° C and additional anomaly contours of 0.5° C are shown as broken lines. Negative anomalies are spotted.



旬平均沿岸水温(℃)
Coastal Water Temperature

地点名 (Index Number)	水温 Temp.	偏差 Anom.
石垣島(47918)	22.5	+1.0
御前崎(47655)	13.3	+0.9
八丈島(47678)	15.6	−3.0
小名浜(47598)	11.1	−1.0
宮　古(47585)	10.7	0.0
江　差(47428)	7.7	−
浜　田(47755)	12.5	−

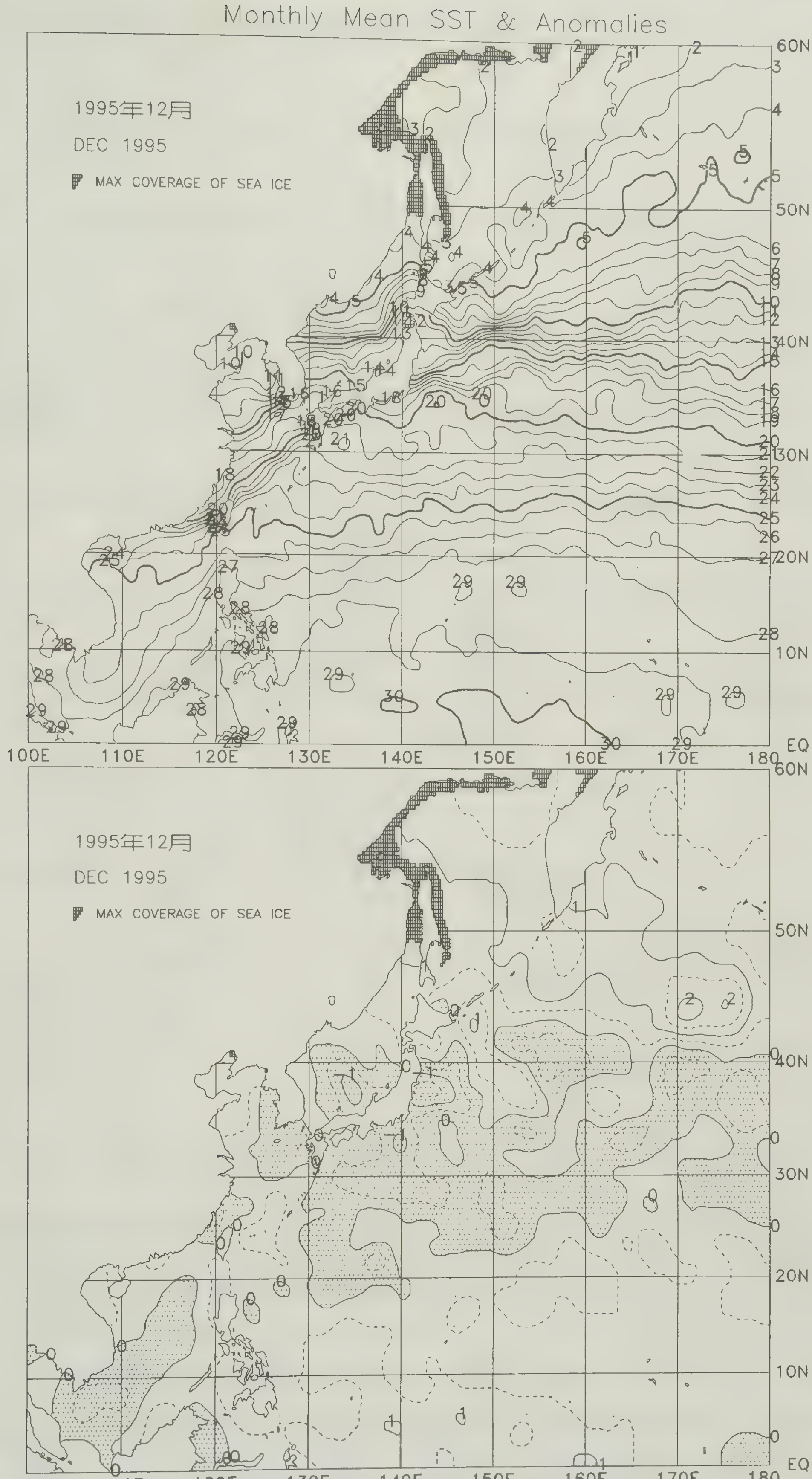


海洋気象ブイロボット
旬平均海面水温(℃)
Ocean Data Buoy SST

日本海	37.9N,134.5E	10.5
四国沖	29.0N,135.0E	21.0
東シナ海	28.2N,126.3E	22.2

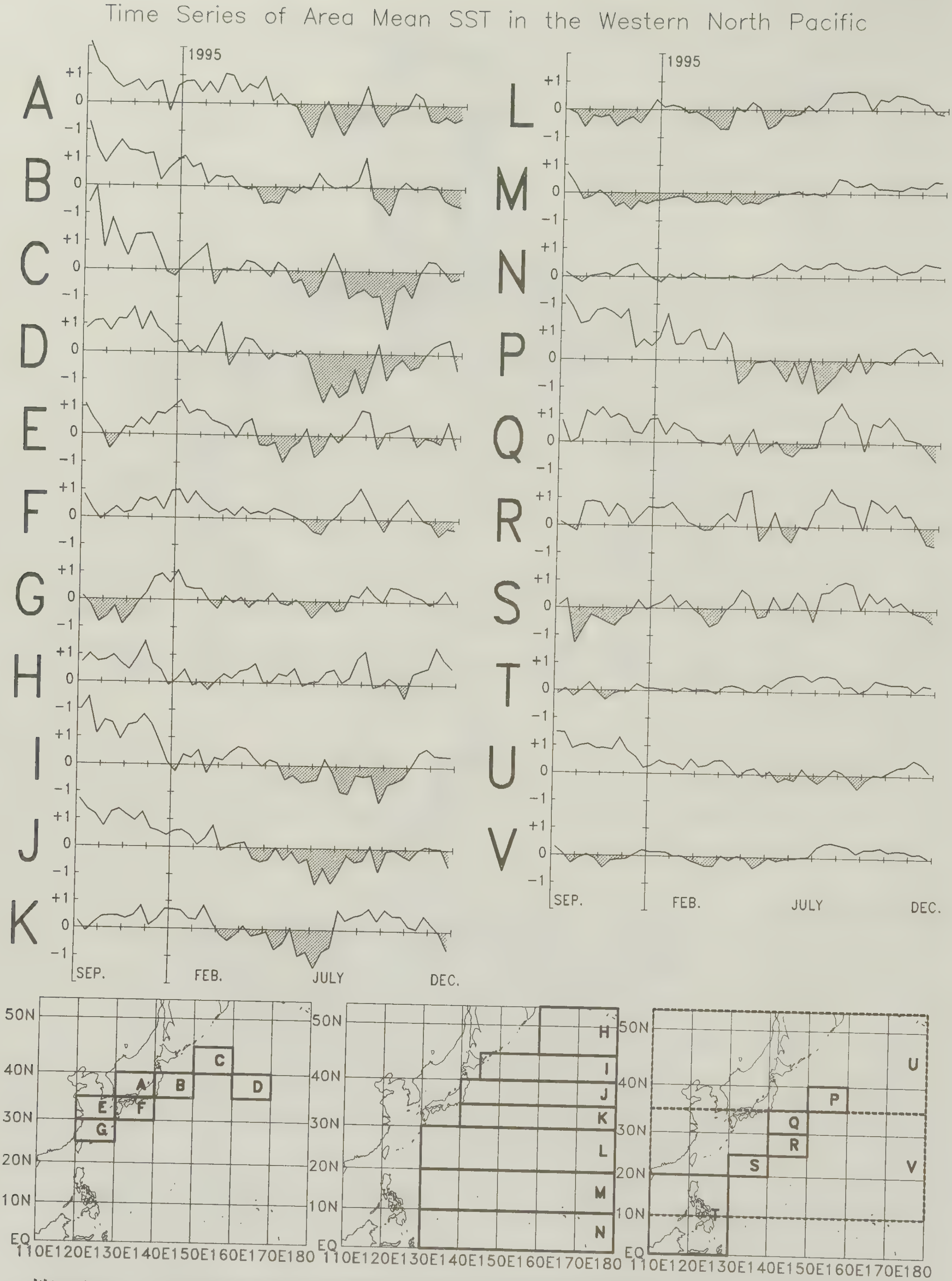
第23図 北西太平洋旬平均海面水温図(上)及び偏差図(下)(1995年12月下旬)

Fig.23 Ten-day mean SSTs in the western North Pacific (top) and anomalies (bottom) for the 3rd ten-day period in DEC 1995. Anomalies are computed from the JMA climatology (1961−90). Contour interval is 1°C and additional anomaly contours of 0.5°C are shown as broken lines. Negative anomalies are spotted.



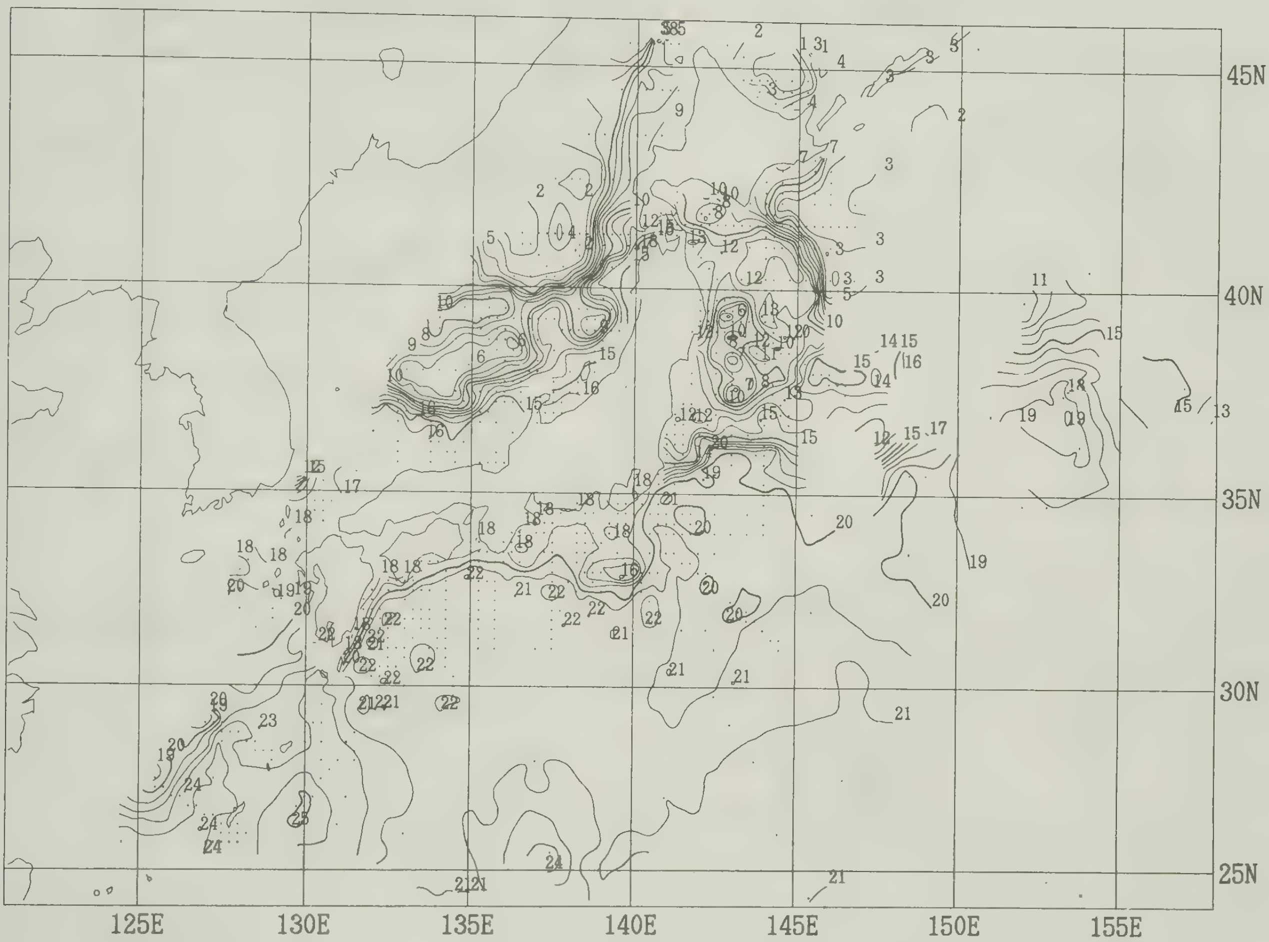
第24図 北西太平洋月平均海面水温図(上)及び偏差図(下)(1995年12月)

Fig.24 Monthly mean SSTs in the western North Pacific (top) and anomalies (bottom) for DEC 1995. Anomalies are computed from the JMA climatology (1961–1990). Contour interval is 1° C and additional anomaly contours of 0.5° C are shown as broken lines. Negative anomalies are spotted.



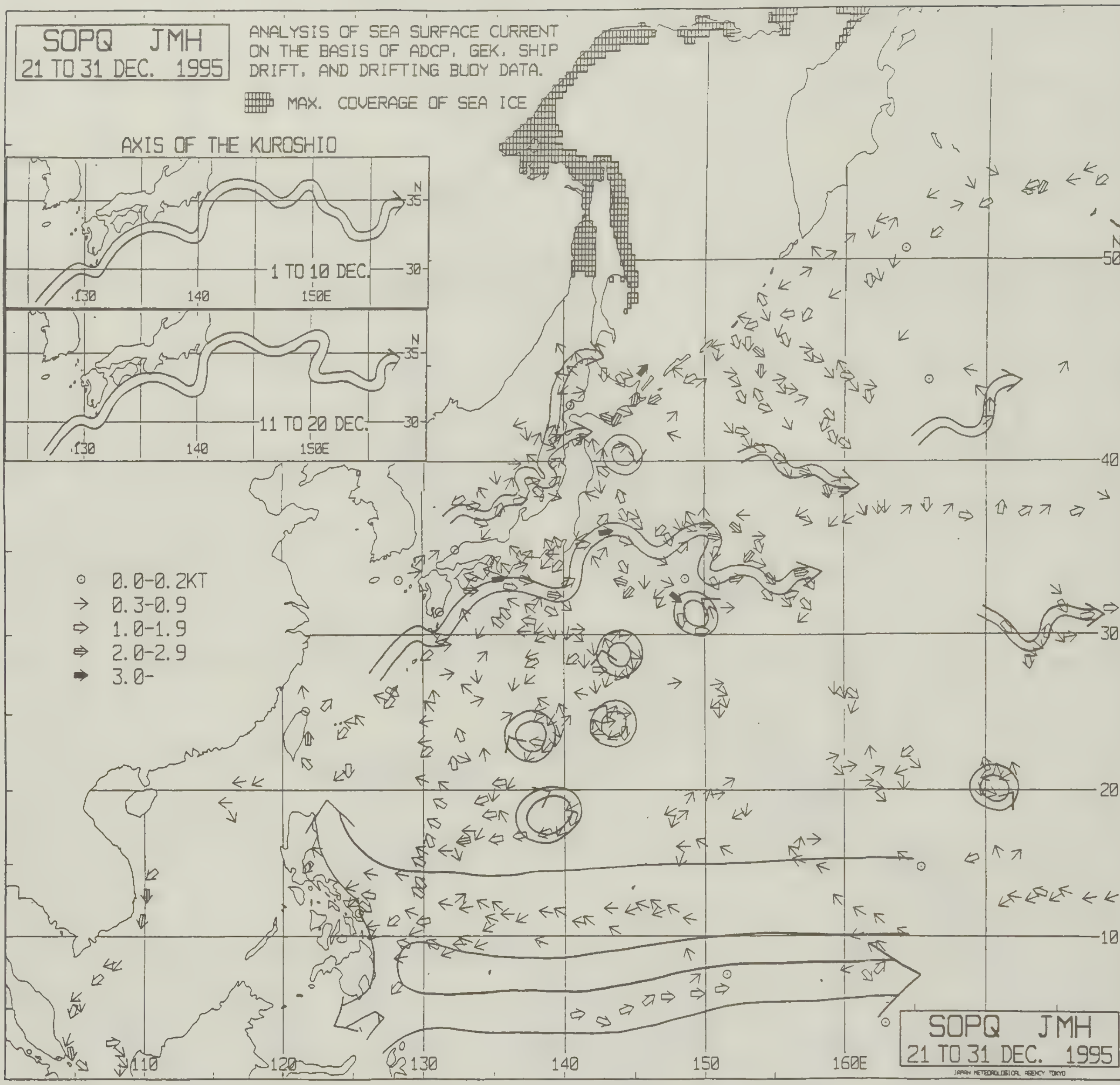
第25図　北西太平洋旬平均海面水温平年偏差時系列図

Fig.25 Time series of the ten-day mean sea surface temperature anomalies (°C) in the western North Pacific for the areas indicated at the bottom. Negative anomalies are shaded. Anomalies are computed from the JMA climatology (1961–90).



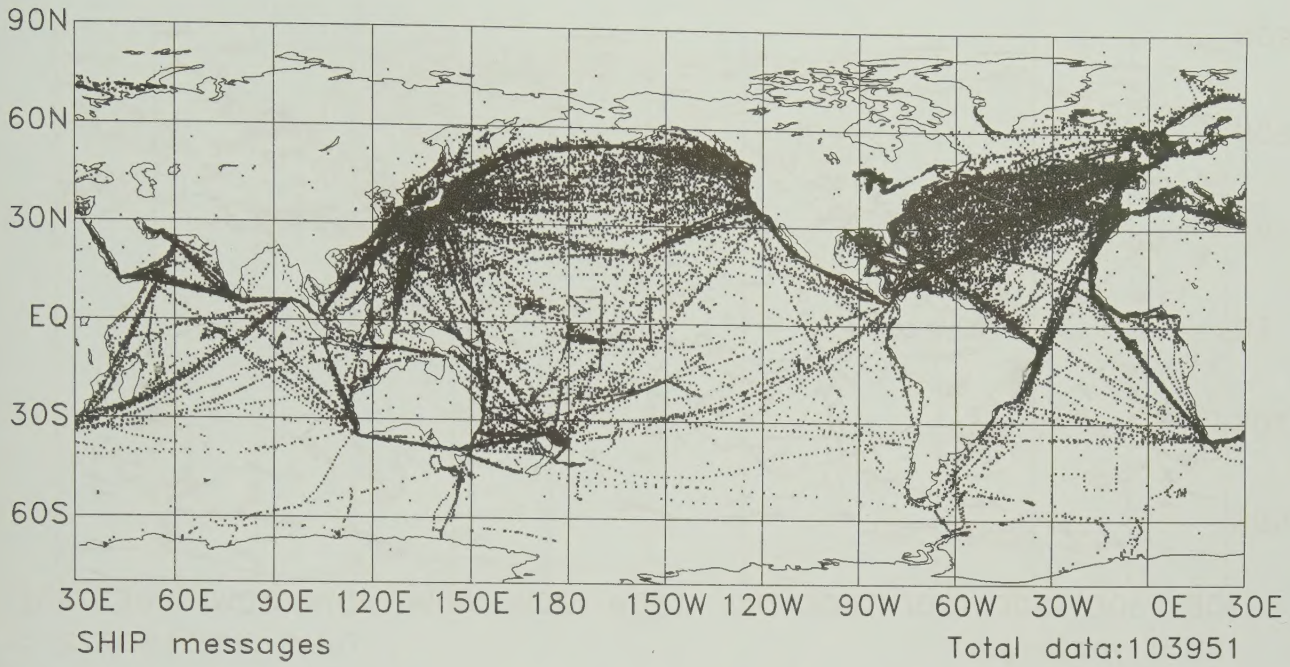
第26図　日本近海表層水温(深さ100m)図 (1995年12月)

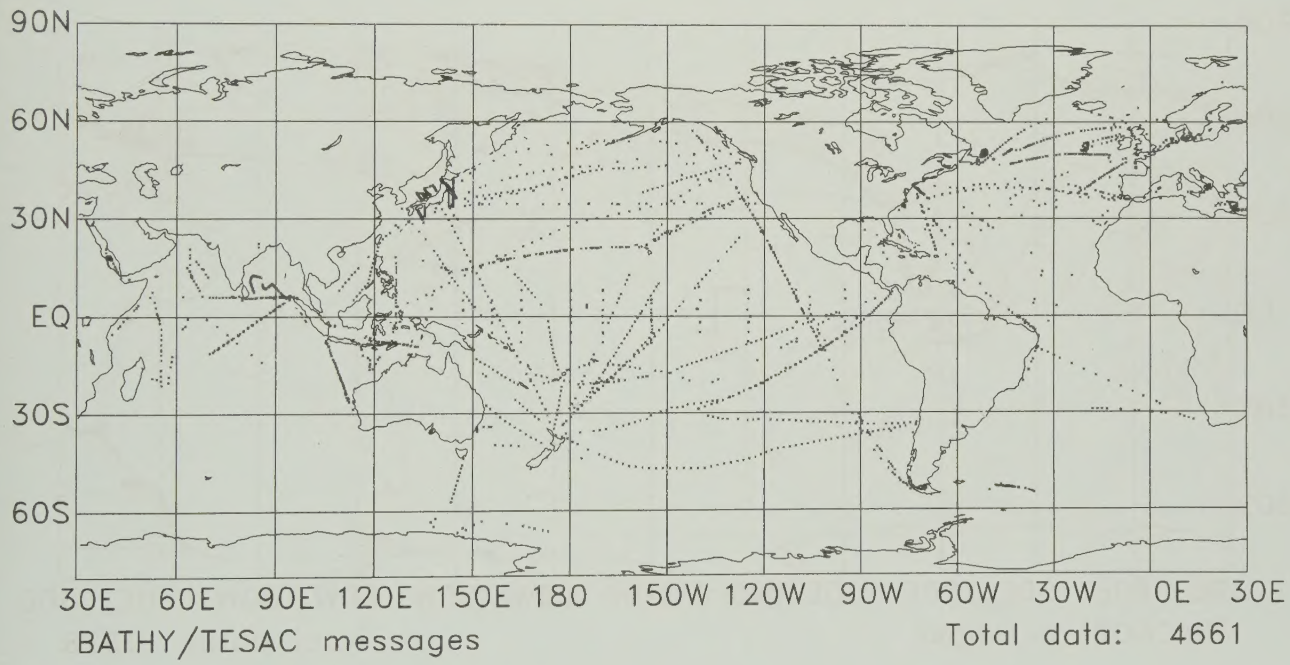
Fig.26　Subsurface (100m) temperatures in seas adjacent to Japan for DEC 1995. Contour interval is 1° C.　Observation points are denoted by dots.



第27図　北西太平洋海流図（1995年12月下旬）

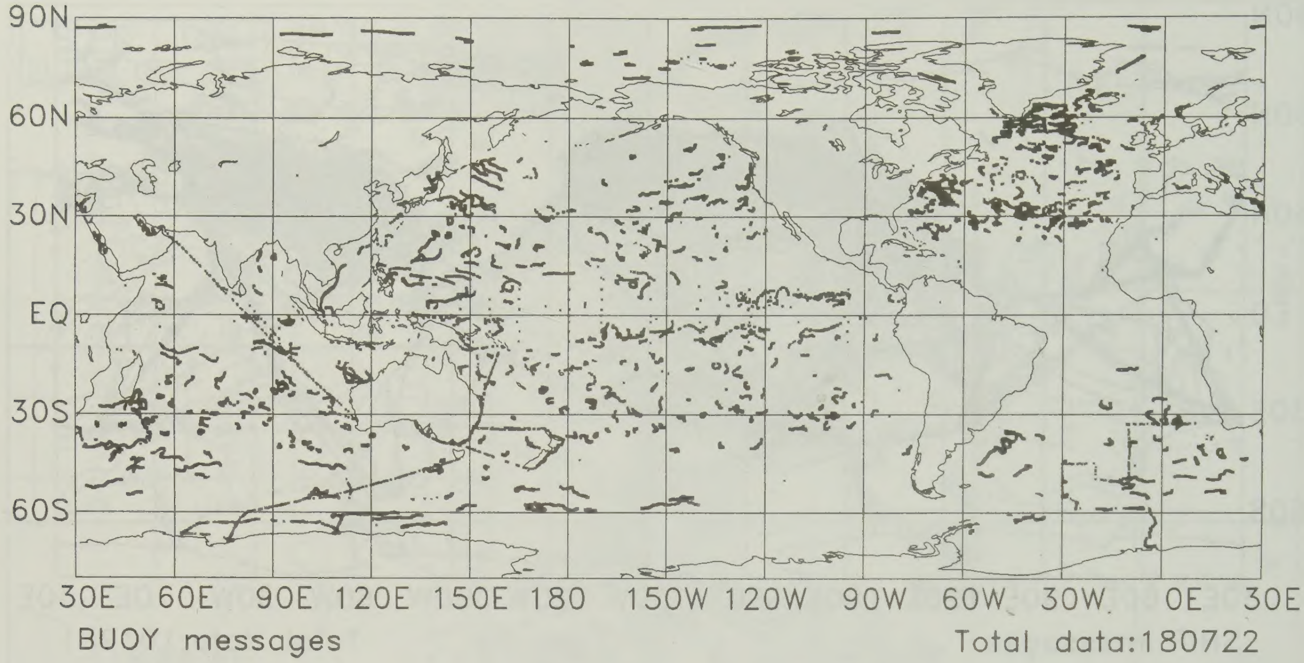
Fig.27 Analysis of the sea surface current in the western North Pacific for the 3rd ten-day period in DEC 1995. Small arrows indicate sea surface currents measured with acoustic Doppler current profilers, GEKs deployed in research vessels, and ship drift by merchant ships/drifting buoys during the month. Major currents such as the Kuroshio and the North Equatorial Current are denoted by larger open arrows.

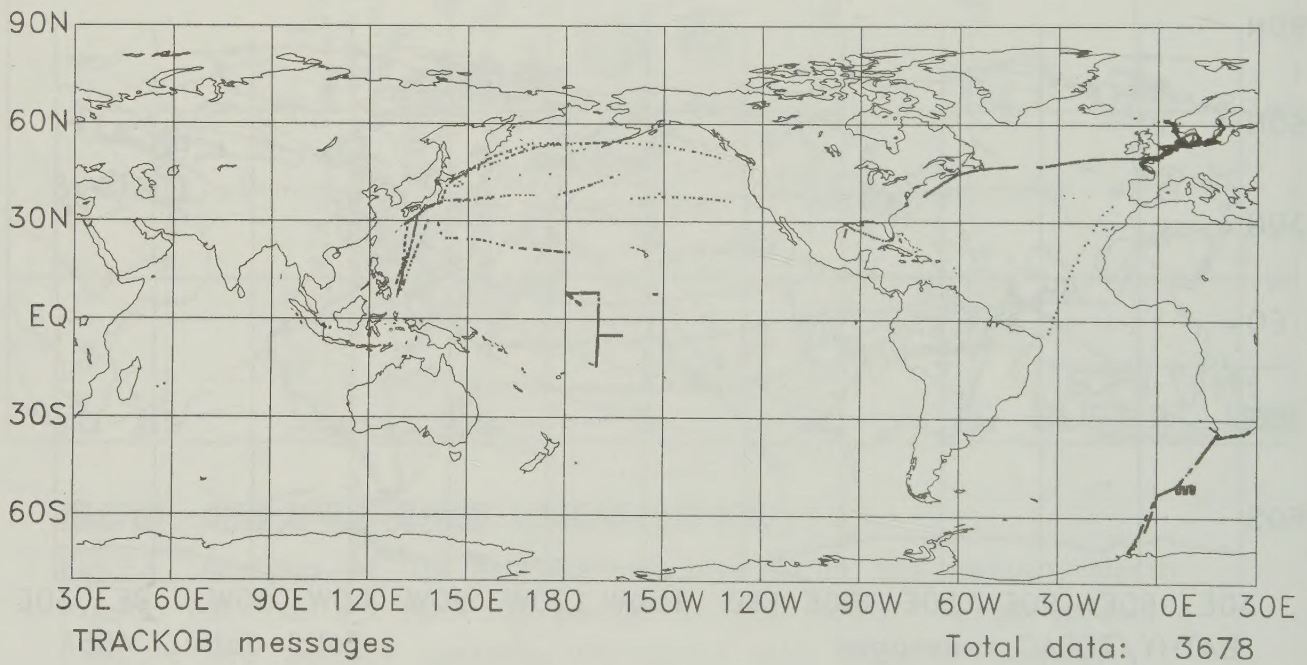




第28-1図　測点分布図(1995年12月)

Fig.28-1　Geographical distribution of SHIP messages (SST data, top) and BATHY/TESAC messages (subsurface temperature data, bottom) for DEC 1995.





第28-2図 測点分布図(1995年12月)

Fig.28−2 Geographical distribution of BUOY messages (buoy drift and SST data, top) and TRACKOB messages (ship drift and SST data, bottom) for DEC 1995.

気象庁海洋月報

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